

UNITED STATES OF AMERICA
DEPARTMENT OF AGRICULTURE

+ + + + +

NATIONAL ORGANIC STANDARDS BOARD

+ + + + +

ORAL COMMENT WEBINAR

+ + + + +

TUESDAY
OCTOBER 15, 2019

+ + + + +

The National Organic Standards Board
met via web conference, at 1:00 p.m., Harriet Behar,
Chair, presiding.

PRESENT

- HARRIET BEHAR, Chair
- STEVE ELA, Vice Chair
- SCOTT RICE, Secretary
- SUE BAIRD
- ASA BRADMAN
- JESSE BUIE
- TOM CHAPMAN
- LISA de LIMA
- RICK GREENWOOD
- DAVE MORTENSEN
- EMILY OAKLEY
- DAN SEITZ
- ASHLEY SWAFFAR

NEAL R. GROSS

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

ALSO PRESENT

PAUL LEWIS, Director, Standards Division

MICHELLE ARSENAULT, Advisory Committee
Specialist

DEVON PATTILLO, Materials Specialist, Standards
Division

ANGIE PEGUES, Management Analyst

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

1:01 p.m.

MS. ARSENAULT: Welcome to the National Organic Standards Board comment webinar. We have webinars today from 1:00 to 4:00 and then again on Thursday from 1:00 to 4:00.

And I'm going to turn it over to Paul Lewis, who will official open the comment webinar for the NOSB meeting.

MR. LEWIS: Thank you, Michelle. And good afternoon, I am Paul Lewis, Director of the Standards Division of the National Organic Program.

I'd like to welcome NOSB members and the public to today's NOSB public comment webinar.

And I appreciate the members participation in this call and for all your work serving on the Board and preparing for the webinar this week and for an upcoming Board meeting next week.

This webinar offers the opportunity of the public to provide comments to the Board, as part of the Boards upcoming public face-to-face meeting that will be next week in Pittsburgh from

NEAL R. GROSS

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

October 23rd to 25th. Please consult the NOP website for further information about the face-to-face meeting.

This meeting, like other meetings of the National Organic Standards Board operated under the divisions of the Federal Advisory Committee Act. I look forward to hearing the comments from the public, to assist the Board in preparing the recommendations to the USDA in response to NOSB work agenda items.

I also want to thank my National Organic Programs Standards Division colleagues for all their help, both today and behind the scenes to bring us today's teleconference and for upcoming webinars. Let me close by also thanking Harriet Behar, Chair of the NOSB, for all her work serving as our chair for this year. Harriet, thank you for Chairing the webinar and I turn to you. Thank you.

CHAIR BEHAR: Thank you, Paul. So, I wanted to also just reiterate that public comments is a very important part of the rulemaking process.

NEAL R. GROSS

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

And be assured that your comments are very important to the NOSB members as they go about making their recommendations to the National Organic Program.

And lastly, thank you for the time and effort that you have given in giving us your comments.

As a reminder, I just want to say too that registration was required to make comments today and on Thursday. And as we move through today, everyone will be on mute and Michelle will unmute speakers when it's their turn to speak.

I will also announce the next commenter and the next person or two who is on deck, so you can get ready to give your comments.

There is a timer that will start when the speaker begins and will beep after three minutes. So, please finish your sentence and then let's move on to the next commenter. And so, just end when you hear that timer.

Board members will be able to ask questions of you, so don't hang up or leave the

NEAL R. GROSS

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

webinar immediately after your comment because we may want to do some follow-up with you. We'll let you know when we are finished with your moving on to the next.

For new participants who haven't been through this before, only National Organic Standards Board members are allowed to ask questions.

Okay, Michelle, will you then take the roll call?

MS. ARSENAULT: Excellent. And I just want to add one thing that I forgot to mention. Let me open this.

We are recording the Zoom webinar, and we also have a transcriptionist on the line with us. We are sort of testing out the systems in parallel to see how well the recording in Zoom does. Just so folks are aware of that.

All right, I'm going to call roll now for the Board members. So, Sue Baird, are you on the line with us?

Oh my goodness. All right, wait, I am

going to have to make sure I unmute you all. Sue Baird, I see you but I'm going to allow you to talk.

Sorry guys while I work out the kinks of this new platform.

Sue, I lost you. I did see you on the line, Sue. Hmm, I lost Sue.

Okay, I'm going to move on. Harriet, I know you're here, would you like to say present?

CHAIR BEHAR: Present, I am here.

MS. ARSENAULT: Thank you. Asa Bradman. Let me allow you to talk, Asa. Asa, I think you should be, oh, there you go. All right, Asa unmute.

Sue, I unmuted you successfully, I believe. Nope.

MR. BRADMAN: It's Asa.

MS. ARSENAULT: Ah, there we go. It was a little bit of a delay there. Thanks, Asa.

MR. BRADMAN: Thank you.

MS. ARSENAULT: Sue, I'm still having trouble unmuting your microphone. There, you should be unmuted now. Sue, are you there? I'm

NEAL R. GROSS

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

not hearing you if you're talking. All right, we'll come back to Sue.

Tom Chapman, are you on the line with us? I think you were dialing in on the phone only.

And I don't see your number off the top of my head here. All right, Tom, we're going to come back to Tom.

Lisa de Lima. Let's see, Lisa.

MS. DE LIMA: I am here.

MS. ARSENAULT: Hi, Lisa, got you. Thank you so much for that.

Steve Ela, let me make sure your mic is unmuted.

VICE CHAIR ELA: I am here.

MS. ARSENAULT: Steve, your unmuted.

VICE CHAIR ELA: I'm here.

MS. ARSENAULT: Thanks. Rick Greenwood. Rick, let me allow you, unmute your mic here. So, Rick, I, oh, there's a little bit of a delay here. All right, Rick, your mic should be unmuted.

MR. GREENWOOD: Okay, I'm here.

NEAL R. GROSS

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

MS. ARSENAULT: I hear you, great.
How about Dave Mortensen? Dave, I'm unmuting your
mic. Give me a second here.

MR. MORTENSEN: Did you hear me okay?

MS. ARSENAULT: We got you. Thanks,
Dave.

MR. MORTENSEN: Yes, thanks.

MS. ARSENAULT: And, Emily. Let's
see, Emily?

MS. OAKLEY: I'm here.

MS. ARSENAULT: Oh, we got you, great.
So you're unmuted, thank you for that.

And Scott, I saw you log on, let me just
make sure you are unmuted.

MR. SEITZ: This is Scott. Present.

MS. ARSENAULT: Scott, excellent.
Thank you.

And I believe Harriet, Dan, nope,
that's on Thursday. Dan, I just saw your name,
Dan. Let me unmute your mic here. I'm trying to
unmute your mic here, Dan, just give me a second
here. A little bit of a delay.

NEAL R. GROSS

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

CHAIR BEHAR: Michelle, it looks like some of the NOSB members are listed in attendees and have not been promoted to panelist, so I will not be able to see them raise their hands.

MS. ARSENAULT: Okay. I will do that. But I still should be able to unmute them. And, Sue, so Dan and Sue, I can see you on the line but we're not, I'm just not hearing you. So, I'm going to count you as here since I see you dialed in. Dan and Sue.

And how about Ashley. Ashley, are you with us? Ashley, if you are just dialed in on the phone, let me find you. All right, Ashley, I am --

MS. SWAFFAR: Can you hear me? Hello?

MS. ARSENAULT: I got you. We got you. Thank you.

MS. SWAFFAR: Thanks.

MS. ARSENAULT: All right. Okay, and then for the record, A-dae Romero-Briones will not be with us on the call today. She won't be on the webinar.

NEAL R. GROSS

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

And I believe everybody else -- ah, Tom.

Let me go back to Tom here. I'm not seeing Tom on the list yet. I know he is traveling and may be just dialing in on the phone, so I'll keep an eye on that. If he joins us later.

All right, Harriet, I'm going to turn it back over to you. And we can get started with speakers.

CHAIR BEHAR: Okay, great. So, first up is Maddie Kempner with NOFA Vermont. And after her is Linley Dixon with the Real Organic Project.

So, Maddie, as soon as Michelle unmutes you, you can join us.

Michelle, I believe you can see her phone number?

MS. KEMPNER: Hello, can you hear me?

MS. ARSENAULT: Yes, Maddie, go ahead.

We can, yes, I think you and I were muting and unmuting each other.

(Laughter.)

MS. ARSENAULT: Sorry about that.

MS. KEMPNER: Okay.

NEAL R. GROSS

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

MS. ARSENAULT: So go ahead.

MS. KEMPNER: Great, thank you so much.

My name is Maddie Kempner and I am the policy advisory for NOFA Vermont, the Northeast Organic Farming Association of Vermont.

I'm giving comments today on behalf of NOFA Vermont on Vermont Organic Farmers, which is an accreditor certifier representing over 700 organic farmers and processors.

I really appreciate the opportunity to provide comments today. And I also wanted to note that VOF Staff will be providing comments in person at the Pittsburgh meeting next week, so you'll hear more from us then.

And I wanted to comment today specifically on excluded methods in organic production. And in addition to commenting on the excluded methods, vaccines, proposals from the livestock committee, I will also be commenting on the material subcommittee's proposal. I just want to note that since I didn't mention it in my original request to comment.

NEAL R. GROSS

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

At the outset, I just want to state while this is not on the NOSB's current work agenda, I want to reiterate, for the record, that the current regulations prohibit the use of gene editing in organic production and that NOFA Vermont, VOF, the NOSB, need to continue to vocally oppose the inclusion of all forms of genetic engineering in organic across the board.

In relation to the materials subcommittee's excluded methods proposal we support the addition of induced mutagenesis developed through in vitro nucleic acid technics to the table of excluded methods because this can be considered an invasion into the plant genome.

We feel that it clearly meets the definition of genetic engineering based on the criteria provided in the NOSB's recommendation starting in 2016.

We also support the proposed addition of embryo transfer in livestock to the chart of not excluded methods. We, I will say, we've only had a few questions over the years about the use of embryo transfer on organic farms, but we

NEAL R. GROSS

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

understand that this process would be approved as long we hormones were not used to synchronize the animals receiving the transferred embryo.

And I will also note that we haven't hadn't producers in the past who are willing to undergo this process without the ability to use hormones to synchronize estrous, so it hasn't been something that our producers have found necessary.

But we do support allowing it so that if producers have alternative methods or means of predicting or synchronizing estrous outside of the use of hormones, that they can do that.

And then lastly, I wanted to comment on the excluded method vaccines proposal. Vaccines are a really important tool for organic livestock producers and an important component of the principle of disease prevention in organic production.

So we do support continued, continued work on allowing the use of vaccines in organic production.

We do currently verify, to the best of

NEAL R. GROSS

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

our ability, that vaccines used by our producers are not produced using excluded methods. So we take a fairly strict stance on that and have not allowed the use of GE vaccines for our producers.

And we believe that the current regulations prohibit the use of GE vaccines unless they are on the National List.

So, in the interest of -- we do support the proposal to allow excluded method vaccines where there are not non-GE vaccines that are commercially available.

And in the interest of improving consistency across certifiers, certifiers should work together to develop safest GE vaccines that don't have commercially available equivalents. And all --

(Telephonic interference.)

MS. KEMPNER: -- documentation for producers for non-GE vaccines is going to be a critical component in improving consistency in this area.

CHAIR BEHAR: Okay, anyone have any

NEAL R. GROSS

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

questions for Maddie?

I have one, Maddie. I'm just wondering is this, the livestock vaccine --

MS. KEMPNER: Yes.

CHAIR BEHAR: -- proposal, do you feel that there is -- that this shows a willingness to accept the GMO vaccines in our regulation on GMOs, or as a way to promote non-GMO vaccines to be more available?

MS. KEMPNER: I would say that this, first of all, and what we would support as well, is the latter. That this provides an opportunity for there to be more available information in terms of the GE vaccines, or the vaccines that are available that are not produced using excluded methods.

And also, to increase and encourage, producers of vaccines to develop them not using GE methods.

I think if there are (telephonic interference) regular search is happening from organic producers, to document that vaccines aren't

NEAL R. GROSS

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

currently available, I think that will trigger, hopefully producers of these vaccines to start developing them without excluded methods where there currently aren't non-GE options.

CHAIR BEHAR: Thank you. And I see that Steve has his hand raised. Do you have a question, Steve?

VICE CHAIR ELA: I do. I mostly just want to make sure, on my screen I can only see about eight of the NOSB members, and I want to make sure that those that just called in, there may not be, that don't have the raise hand functionality have a way to ask questions.

Because if Michelle doesn't unmute them, they may not be able to get your attention, Harriet, so just want to make sure they can --

CHAIR BEHAR: That's true. Okay, I'll open up my email on my second screen and so, if you want to email me quickly and let me know you have a question, then that's one way. And then I can read it if Michelle can't figure out a way to unmute you.

NEAL R. GROSS

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

CHAIR BEHAR: But thank you for that, Steve.

VICE CHAIR ELA: Yes.

CHAIR BEHAR: Any other questions from anyone? I have my email open. Okay, I guess not.

So, next up is Linley Dixon, and after her is Charlotte Vallaey's with Consumer Reports.

So, Linley, hopefully Michelle can unmute you.

MS. ARSENAULT: Yes. Linley, I'm not finding your name in the list here and I'm not seeing -- let me see if I can find your 970 number. I hope this is you. I'm going to unmute your mic now.

MS. DIXON: It's me.

MS. ARSENAULT: All right, we got you.

MS. DIXON: Thanks, Michelle.

MS. ARSENAULT: Thank you.

MS. DIXON: I'm Linley Dixon, the Associate Director of the Real Organic Project. We're a farmer-led grassroots effort to keep organic standards in line with OFPA.

At the close of our second

certification season here we have over 250 farms certified for an add on soil grown and pasture raised organic label.

The formation of the Real Organic Project is a result of major failures of the National Organic Program to enforce basic organic standards. Which includes livestock grazing standards, the origin of livestock rule, real outdoor access for poultry and enforcement of the soil fertility and crop nutrient management practice standard.

These failures effect the foundations of what makes organic, organic.

The emergency of alternative sustainability labels, that directly compete with the organic seals, are a direct result of the failures of USDA Organic to remain soil grown and pasture raised.

Failure to uphold these basic tenets of the law has resulted in severe unfair competition under the organic seal. Organic berry farmers are being driven out of business by the rapid influx

NEAL R. GROSS

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

of hydroponic berries under the same label. Despite extreme differences and cost of production.

Please educate yourself on the practices of a five year disposable plastic hydroponic blueberry farm.

Likewise, organic dairy farmers have actually graze their cows cannot compete with those that feed total mixed rations before turning them out, bellies full, to "pasture" right next to the milking facility. It's not grazing, it's bellies are full with TMR and the grass is too short to graze on anyway.

ROP is an attempt to restore fair competition under the organic seal, under standards that follow the principles of OFPA.

Of course, the lifeline we're providing to farmers and the organic label will be too late for many producers, but hopefully not too late for the continued credibility of the word organic.

Grass-fed and pasture labels are gaining in popularity because organic isn't ensuring pasture. Consumers are becoming more and

NEAL R. GROSS

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

more aware of the connection between healthy soils and nutrition and their looking towards those pasture and soil grown claims in OFPA.

Last spring it was the Real Organic Project that provided the evidence that certifiers were allowing the certification of hydroponic production without a three year transition.

Before we released the evidence that we knew what was occurring, the NOP, several times, publicly stated that the allowance of herb sites prior to certification was hypothetical. The Real Organic Project shouldn't know more about what is going on than the NOP.

The NOP still has not clarified whether or not a three year transition is required for hydroponics and greenhouses. Immediate conversion of conventional greenhouses to organic provides a serious loophole allowing prohibited substance use between organic crops continuously.

As NOSB members, please use your microphone to help make the Real Organic Project completely obsolete by working to endorse the still

NEAL R. GROSS

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

standing 2020 recommendation and the language in OFPA that requires the fostering of soil fertility and organic production.

When you travel across the U.S. you come to understand how universal soil health is when visiting farmers on their farms. It's what organic means to organic farmers.

CHAIR BEHAR: Thank you, Linley. I see Emily has a question.

MS. OAKLEY: Thank you, Harriet. Linley, I think you brought up an issue that several stakeholders that are also still concerned about, which is clarification of the NOP memo on this year's transition period. With respect to greenhouses or other facilities, particularly indoor facilities.

And I was wondering if Paul or someone on this program is on the call, would be able to address that for us?

Is Paul still on the call, Michelle?

MS. ARSENAULT: Sorry, Emily, hold on one second. I am having to mute and unmute people's

NEAL R. GROSS

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

mics individually and select to find. Sorry, give me one second here. There is a lot of 202 numbers on here. And I believe this one was Paul.

MR. LEWIS: Hi.

MS. ARSENAULT: Can you say something, Paul?

MR. LEWIS: Hi, Emily.

MS. ARSENAULT: We got you.

MR. LEWIS: Can you hear me now? Emily, thanks for the question.

At next weeks NOSB meeting, Deputy Administrator Chuck will be talking about the memo, and in terms of finding any additional clarification on the memo per say. So, if you can wait until next week in terms of, will she make remarks about that, I appreciate it.

MS. OAKLEY: Thank you.

MR. LEWIS: You're welcome.

CHAIR BEHAR: Any other questions from the Board?

I just have one comment. Linley, and thank you for working with so many committed and

passionate organic producers.

Okay, next up we have Charlotte Vallaeys and then Andrew Dykstra with WODPA, and then after him Peyton McDaniel with Hickory Meadows Organic Farm. So, next Charlotte, then Andrew, then Peyton.

MS. ARSENAULT: Andrew, I unmuted you but, well, I'm going to mute you again and unmute you again. Andrew, you should be unmuted now. Go ahead and speak and see if we can hear you.

We're not hearing you but it looks like your mic is unmuted, on my end. No. Now, if you're talking we still can't hear you.

Maybe you want to dial in one of the numbers that are on the screen. If you want to dial in using your phone instead of using your computer. I don't know if you can, so it's 929-436-2866. I just gave you the east coast number. Hopefully that was correct.

CHAIR BEHAR: Michelle, should we go to the next one then come back?

MS. ARSENAULT: Yes. It's up to you.

All right, Andrew, we're going to come back to you.

CHAIR BEHAR: Okay, so next up would be Peyton McDaniel.

MS. ARSENAULT: And I have not seen Peyton on the line. Let me see. I have a couple maybe just on the phone instead of on the webinar. There's two of them.

All right, I have two numbers with an area code of 252, so I'm going to unmute both of you because I don't know which one belongs to --

MR. MCDANIEL: Hello, this is Peyton McDaniel with Hickory Meadows Organic.

MS. ARSENAULT: Hey, Peyton, great. We can hear you fine. Thanks.

MR. MCDANIEL: Okay, great. Just, I want to say a little bit about myself and our farm.

We grow 600 acres of certified organic crop. Being doing so since 2007. Tobacco is a major part of operation and we don't feel like it can be done without the use of fatty alcohols for sucker controls.

NEAL R. GROSS

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

For starters, it's going to increase our labor cost to where we may not even consider growing the crop anymore. It may just push us out.

Not to mention, it will increase the change of green tobacco sickness with workers. These are just a few of the things that we really, we really need this in our toolbox as organic farmers.

The toolbox is a little limited as it is. It's something that we really need. And I would request that the NOSB and USDA add fatty alcohols to the National List of allowed substances. Thank you.

CHAIR BEHAR: Okay, are there any comments or questions? I see Emily has her hand raised. Go ahead, Emily.

MS. OAKLEY: Thank you. Thank you for your comments. I was wondering if you had grown tobacco without the use of fatty alcohol before?

MR. MCDANIEL: We have. We did for several years. I can't exactly remember the dates but I think it was from '07 to somewhere around

NEAL R. GROSS

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

2010, '11, something like that.

And it was very labor intensive. We did use some mineral oils and it just, it wasn't good for the crop. There was no way around it, in my eyes. So, I hope that answers your question.

MS. OAKLEY: Thank you.

CHAIR BEHAR: Any other questions? I have one question. How many acres of organic tobacco do you grown, Mr. McDaniel?

MR. MCDANIEL: This year we had about 50 acres.

CHAIR BEHAR: And then do you sell it to just one buyer or do you have a variety of buyers?

MR. MCDANIEL: I have two separate contracts. Two different buyers.

CHAIR BEHAR: Okay. Okay, Emily, do you have your hand raised again?

MS. OAKLEY: I do not.

CHAIR BEHAR: Okay. Then ready to move on. Is Andrew back?

Okay, so next up is Jennifer Daniels with Jane Iseley up after her. Jennifer are you

NEAL R. GROSS

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

there? Michelle, can you find her?

MS. ARSENAULT: I am attempting to unmute you, Jennifer. Oh, I just had you. There we go.

All right, there is a little bit of a delay, just give me a second here. I'm attempting to unmute you. Hmm, I am not able to unmute you, Jennifer, from my end here. Hmm.

Jennifer, for whatever reason I am not able to unmute your microphone. Nope. Jennifer, try to talk, try to -- no. If you're talking, we can't hear you.

All right, we maybe come back to Jennifer. Jennifer, if you want to try to dial in on the telephone as opposed to using your computer, if you're using your computer, I believe you are, the numbers are on the screen.

If you're in the east coast time zone you can dial 929-436-2866. There's also a west coast phone number displayed on the screen, 669-6833. And the webinar ID Number is 517961383.

And maybe we'll try you again after the

NEAL R. GROSS

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

next speaker.

CHAIR BEHAR: Do we have Jane Iseley?

Do you have her? And then after that we can look for Andrew, again, from WODPA, and then Jennifer.

And then next in line after that is Alex Watkins, a farmer, you like the farmers.

MS. ISELEY: This is Jane Iseley.

Hello?

(Simultaneously speaking.)

CHAIR BEHAR: We can hear you. Thank you.

MS. ISELEY: I'm sorry, can you hear me?

MS. ARSENAULT: Yes. Jane, we can --
(Telephonic interference.)

MS. ISELEY: -- very much. My name is Jane Iseley and I live in Burlington, North Carolina.

I am my grandfather's only grandchild and so therefore I am the custodian of the family farm that's been in the family since 1790. Many of those years were spent growing tobacco.

NEAL R. GROSS

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

We have other crops. Strawberries, tomatoes, pumpkins, and an all-natural herd of 150 cattle.

The farm has been certified organic, or parts of the farm, for 22 years. It started with Santa Fe Natural Tobacco then.

We have tried, someone asked about other sources of sucker control. We've used mineral oil for several years when we started and unsuccessfully to the point, if you got hot weather, the leaves would drop off. And of course, you sell your tobacco by pound so that wasn't good.

I don't know that you all understand the process of suckering and what happens. You have, on an acre of tobacco, you have about 6,000 tobacco plants.

They have from 18 to 20 leaves. And each of those leaves has an opportunity to grow three suckers. A plant wants to make seeds if they can. So, you do your math there and 360,000 opportunities for suckers in an acre of tobacco.

So, you can see where labor, hand labor,

NEAL R. GROSS

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

of breaking those suckers out becomes a problem.

And of course, if you get lots of suckers, the quality of the plant and the weight of the plant dissipates.

We had an experienced this season where we had a breakdown with our sprayer. It took us a little over a week to get the parts and get it back working. And we just had a nightmare.

I suspect that a lot of our bottom lines are going to be gone to labor this year. That we had to put in, in pulling suckers.

Someone mentioned, how about suckers on tomatos. They were concerned you can't, you know, if you're going to give an opportunity to do like this to tobacco growers, what about tomato growers.

We understand that rather than 6,000 plants an acre you're tomatos are growing about 2,000 plants per acre. And what you do suckering tomatos, you work from the bottom of the plant. You break off one time.

There's only one opportunity to break

NEAL R. GROSS

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

off the sucker. You break it off, the bottom three suckers. You break it from the bloom down.

So, you're talk about, rather than 360,000, you're dealing with 6,000, or one and a half percent of what you're dealing with. With tobacco.

We are a small farm, basically. We only grow about 30, we did grow 30 acres of tobacco. The tobacco pays the bills.

We do all these other things, but it pays the bills. And I wrote 16 payroll checks last week.

So, if you take this OTAC away from us, you're basically going to put us out of business.

And I would appreciate it if you consider continuing to let us the product. Thank you.

CHAIR BEHAR: I don't see any questions. I have one question. What are the other crops that you grow in rotation?

MS. ISELEY: We plant fescue and hay and oats and cut it, the hay, for our cattle. And then bush hog after the first cutting.

NEAL R. GROSS

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

CHAIR BEHAR: And so then, what is it rotation (telephonic interference) then back to tobacco for one year --

MS. ISELEY: Yes.

CHAIR BEHAR: -- and then continue --

MS. ISELEY: Yes.

CHAIR BEHAR: -- that rotation?

MS. ISELEY: Yes.

CHAIR BEHAR: Okay, sounds good. I just want you to know that I have actually helped cut tobacco here in Wisconsin.

We don't have much of that left anymore, but I understand the culture. And the whole community comes together and helps (telephonic interference) and that it is a very valuable cash crop to help put, family farms, keep them in (telephonic interference).

MS. ISELEY: Well, we prime it one leaf at a time. So, we prime it four times as opposed to cutting it down.

CHAIR BEHAR: Oh, okay.

MS. ISELEY: Thank you.

NEAL R. GROSS

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

CHAIR BEHAR: Yes, you're welcome.
So, Michelle, do we have Andrew back or Jennifer?
Michelle, you're on mute.

MS. ARSENAULT: I am on mute. So, all
right, do you want to go back now or do you want
until the end?

CHAIR BEHAR: No, I would like to go
back now because they were scheduled for earlier.

MS. ARSENAULT: Okay.

CHAIR BEHAR: Are either of them ready
to go?

MS. ARSENAULT: Andrew, your mic is
unmuted, can you try and say something? Maybe we
can hear you now. Nope.

Let me see. I don't see Andrew as just
a phone number so. Oh, wait, hold on one second.
Nope, I don't see Andrew's phone number either.
Maybe he thought he was dialing in. I also don't
see the phone number that he registered with.

And Jennifer? Is that right?
Jennifer. Jennifer, you are also unmuted, can you
try and say something?

NEAL R. GROSS

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

Jennifer, if you're talking, we can't hear you speaking. Jennifer, maybe you, ah. So, Jennifer, go ahead and try to speak. Try to say something.

MS. DANIELS: This is Jennifer.

MS. ARSENAULT: Hey, we can hear you. You're a little faint, so if you could speak up that would be great.

MS. DANIELS: Okay.

CHAIR BEHAR: Please give your comment.

MS. DANIELS: Yes. Okay. My name is Jennifer Daniels and the name of our farm is Windy Creek Farms. We're located in North Carolina.

And we are also flue cured tobacco growers, so just like Jane had mentioned, we crop ours one week at a time.

We have been certified organic since 2014. And we grow tobacco, sweet potatoes, soy bean, pickling cucumbers, and bell peppers and jalapeño peppers organically.

And fortunately, tobacco was how we

NEAL R. GROSS

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

transitioned into the organic market because we could get a contract therefore, you know, be able to borrow money to grow that crop.

Currently, we have 200 acres of certified organic farming. Unfortunately, the market for organic tobacco has decreased some. I think because of another supply issue. And so, this year we only had 12 acres of organic tobacco.

But with all this being said, the reason I volunteered to call in is because tobacco is still very important to our farming operation because it is the biggest cash crop as far as per acre, being able to make money.

(Operator interruption.)

MS. DANIELS: Okay, I'm not sure what that was.

Without the fatty alcohols to be able to reduce the amount of suckers that we have to remove by hand, it would damage the rest of our operation because typically we spend most of our hand labor, early spring, working on the cucumbers, picking those. And then we move into our peppers

NEAL R. GROSS

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

and then we move into our sweet potatoes.

At the same time, we are also working with our tobacco. But we can do most of that mechanically, once we have, when we had the use of the OTAC.

So, it would change our operation. And just talking about, right, not only the time and labor that we need to be able to pick our produce, it would also, we think it will increase, it will take three times as much money to be able to take care of that tobacco if we did not have the OTAC.

Now, we were not, we've always had OTAC in our arsenal to be able to use, so I don't have any experience without it. But I think everyone has explained the reasons.

It's not just being able to get rid of those suckers, those suckers, the flowers that come along with that also attract insects and/or cause more issues, those type things.

And the longer you have suckers on a plant, the energy goes to produce those suckers, which are not harvestable. We cannot make any

NEAL R. GROSS

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

money off of the suckers, it's on the leaves.

So it actually deteriorates the quality of the tobacco leaf. So, we would really, really appreciate it if you all would be able to give that, let us keep that tool that we have been able to use.

MS. ARSENAULT: Harriet, if you're talking --

CHAIR BEHAR: No, I'm here.

(Laughter.)

CHAIR BEHAR: I don't see any questions from the rest of the Board members, so we will move --

MS. ARSENAULT: Harriet, can I just interrupt a second --

CHAIR BEHAR: Yes.

MS. ARSENAULT: -- just to make sure Steve doesn't have a question?

I promoted Steve to co-host and his raise hand button disappeared. For the rest of you Board members, that is also the case. I can demote you if you would --

NEAL R. GROSS

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

VICE CHAIR ELA: I don't have a question but I just, I want to let --

MS. ARSENAULT: Okay.

VICE CHAIR ELA: -- you know I was looking for raised hands and we can't do that anymore.

MS. ARSENAULT: Okay, I'm sorry.

CHAIR BEHAR: Oh.

MS. ARSENAULT: All right, thanks.

CHAIR BEHAR: Okay. I would like to just ask if anyone, take yourself off of my mute, any panelist on the Board. If you have any questions you'll have to shout them out because I can't see you raise your hand anymore.

Is Andrew back, Michelle? If not, let's move on to Alex Watkins with Mike Faucette on deck. Can you find Alex or Mike?

MS. ARSENAULT: All right, he should be unmuted.

MR. WATKINS: Hey, this is Alex. Yes?

MS. ARSENAULT: Alex, we can hear you.

MR. WATKINS: Okay. How you all doing

NEAL R. GROSS

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

today. Thank you for letting me have the opportunity to speak. My name is Alex Watkins and I'm from Creedmoor, North Carolina.

And Jane and Jennifer and Peyton done a great job of describing the plant to you all. I don't see any need for me to elaborate on it anymore.

The use of the fatty alcohol is very important to us. I currently have 250 acre of certified organic land. I have about 70 acres of tobacco this year.

I plant 90 acres of wheat, 75 acres of soybeans. And the last two years I planted three acres of hemp. A new crop we're trying.

We'd really like to try to keep these fatty alcohols on if we can. I have a lot of experience in the past. I started growing for Santa Fe in 2003.

And we used several types of oils, like mineral and soybean oils. And Jane was right, we have a lot of leaf drop off. And we get paid by the pound.

NEAL R. GROSS

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

And when we get winds or heavy rains, and we used materials like that, it really put the leaves on the ground. And that's a little tough for us.

I'd like to ask you to please reconsider not removing it if possible. It's very crucial to my operation.

This is pretty much all I've done. I'm 50 years old, it would be very difficult for me to try to get a job at my age somewhere.

And I already know, we have a \$.55 per hour increase in our labor prices for 2020. And that would put us, we at \$2.25 an hour now, that would put us \$.55 because it would take \$12.80 per hour for our migrant help.

And I'd just like to say, you know, being certified organic means a whole lot to me.

It's changed my farming outlook in ways I've never thought and it's reconditioned my land.

And it all comes from this opportunity to plant tobacco from Santa Fe. I do have two contracts with the Japanese also, so I'm selling

NEAL R. GROSS

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

to two companies.

You know, in just a rotation of my small grains, my wheat and soybeans and then come back with tobacco the third year, has increased my yields. When I was a conventional farmer back in the 1990s, I mean, my yields now are higher being organic on all my commodities and my tobacco then they were when I was a conventional farmer.

So, makes me proud to tell people I'm an organic farmer. And I'd just like to say, thank you for letting me speak today and ask you all to please help us stay in business so we can tell everyone that being organic, here is the way to go now and in the future. For all of us.

And thank you for letting me speak to you all today.

CHAIR BEHAR: Thank you very much. Anyone from the Board have comments? Steve, your unmuted?

VICE CHAIR ELA: No comment.

CHAIR BEHAR: Oh, okay. Thank you very much, Alex. And Mike Faucette is next with

NEAL R. GROSS

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

Mike Hocutt on deck. And, Michelle, if you ever find Andrew let me know.

MS. ARSENAULT: Thank you.

CHAIR BEHAR: We can hear from Mike Faucette.

MR. FAUCETTE: Hello.

MS. ARSENAULT: Mike, oh, there you are.

MR. FAUCETTE: How is everybody?

MS. ARSENAULT: Yes, you're unmuted.

CHAIR BEHAR: Thank you. We can hear you, Mike, go ahead.

MR. FAUCETTE: Okay. My name is Mike Faucette, this is my son Kyle Faucette. We're a long time farming family here in the same area in Browns Summit.

One of the farms I farmed, farmed with my father, farmed when he was farming. And of course, my grandfather.

Anyway, we've been growing organic tobacco since 2007. We have organic strawberries, we grow organic grain and we grow sweet potatoes.

NEAL R. GROSS

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

Just a variety of vegetables we grow organic.

But all of this was started because of tobacco. Now it's been growing for Santa Fe since 2007. And I'm one of the ones that has used vegetable oils in the past. And yes, we do have a problem with vegetable oil. We've had big problems with leaf dropage.

Towards the end of the season bleeding back through. So, we definitely need to keep OTAC if we're going to keep this farm operation alive.

Organic tobacco saved crop and our farm. And it's also kept us viable. And it's been a place that my son can come and work and make a livelihood for, hopefully, his lifetime and for my grandkid's lifetime.

We grow about 250 acres of, well, we have about 250 acres of certified organic land. We grow somewhere around 50 acres of organic tobacco this year.

And I'd like to say, OTAC is a big part of our success with tobacco. If you take it away from us, I don't believe we'll be able to keep on

NEAL R. GROSS

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

farming tobacco.

And without tobacco, we can't borrow money to operate on. So, if you take OTAC away and we loss tobacco, we're probably going to end up, my son might go get a job, and me, I'll probably have to start selling land off.

So, please, we would appreciate you leaving OTAC as a viable product for our operation.

Thank you.

CHAIR BEHAR: Thank you. Anyone have any questions? Okay, onto --

MS. ARSENAULT: Oh, Ms. Harriet --

CHAIR BEHAR: -- another Mike, Mike Hocutt. Yes?

MS. ARSENAULT: Harriet, Emily's hand is raised.

CHAIR BEHAR: Oh, Emily.

MS. ARSENAULT: She does have a question.

CHAIR BEHAR: Oh, I see you. Go ahead, Emily. Mike, don't leave.

MS. OAKLEY: Thank you. It's actually

NEAL R. GROSS

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

--

MR. FAUCETTE: Okay.

MS. OAKLEY: Thank you, Mike. It's actually just, I think a bit, more of a clarification.

I don't exactly know the history with the certifier allowing this material before it was approved by the National Organic Program so I just want to clarify that I've heard a couple of commenters, not only with the takeaway in material that they're already using, but I just want people to understand that this is a material that we've used prior to being approved, and I'm sure that is done in good faith.

I know it was done in good faith by the farmers. And I don't understand fully the history of the certifier allowing it, if they thought that it was a natural material and therefore didn't need to be approved.

But it's been determined to be a synthetic material and that's why we're going through this review process because, to be used

NEAL R. GROSS

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

it would need to be added to the National List. So, just from one farmer to another, I'm going to help explain a little bit of this process if in any way that isn't clear or confusing in any way.

So, thank you.

MR. FAUCETTE: I'm not sure exactly what the question is, but we're -- this chemical is a fatty alcohol. And I'm not a chemist so I might be wrong, but from what I'm understanding, and also have understood, is a fatty alcohol, which is nothing but a high concentrated soap. Correct me if I'm wrong.

MS. OAKLEY: Well, Jesse, who is another NOSB Board member, is the lead on this material. But without going into a lot of the details, it's not just a purely natural material that doesn't need to go through a review, it was determined that it does need to go through a review as a synthetic.

And, Jesse, I don't know if you want to jump in and add any comments to that, or Steve.

But I just, it's not a question, I just simply

NEAL R. GROSS

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

wanted to clarify because it seems like folks have been using this for a while and wanted to explain how it is that we're reviewing it now.

CHAIR BEHAR: Well, I can answer that.

I believe the National Organic Program determined it to be a synthetic and asked us to do a review.

And then it was, I'm sorry, and then they told the certifiers to not allow it anymore and that it was deficient. And that's how we begin our review.

I'm not sure that Jesse is with us. Is he, Michelle?

MR. FAUCETTE: That's not correct.

MS. ARSENAULT: Yes, I'm --

CHAIR BEHAR: Oh, you are there. Yay, hi, Jesse.

MS. ARSENAULT: No, Harriet, I am not seeing Jesse on the line with us. That was not Jesse.

CHAIR BEHAR: Oh.

MS. ARSENAULT: I'm not seeing Jesse, yes.

NEAL R. GROSS

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

CHAIR BEHAR: Oh.

MS. ARSENAULT: I'm going to go back and double check that.

VICE CHAIR ELA: I can jump in. This is Steve. Yes, I think the issue is that it's one of those materials that essentially is a soap, but some of the manufacture of it say it is a synthetic process.

While the fatty alcohols do naturally occur, this actual material is a synthetic just the way it's manufactured. So, it was one of those materials that was on the line, that some certifiers thought it was approved as a natural product and then upon further review the National Organic Program determined that it was actually a synthetic.

So, it was kind of in that gray area initially and then it was determined to be not fully natural but as a synthetic, and that's why we're going through the review process.

MR. FAUCETTE: Can I make a comment?

Am I still on the line?

CHAIR BEHAR: Yes, you are. Go ahead.
Go ahead.

MR. FAUCETTE: One of the problems that all organic farmers are having, not just myself, is that we get use to products and then all of a sudden you all, somebody says it's not available for us or we can't use it anymore.

You know, I don't know how we got to use it. I'm thankful we did. But it's been two or three products over the years that we've been able to use and then all of a sudden somebody tells us you can't use them. You're changing our operation. You know, that always puts a stress on a farm.

So I'd appreciate it if you all can see a way -- see that to let us keep using this product, because it is, it's one of the biggest products that keeps us growing organic tobacco. I mean, I know it's not food or nothing and it's not being used on food, but it really is something that we desperately need to keep growing.

Thank you and I appreciate your

consideration.

CHAIR BEHAR: Okay, thank you. Okay, next up is Kelvin Bass. And after that on deck is Jay Willard.

MS. ARSENAULT: Harriet, if you can give me a moment. Andrew, we found Andrew. He emailed me the number he's calling from.

CHAIR BEHAR: Okay. Do you want to do Andrew next or after Kelvin?

MS. ARSENAULT: He is now unmuted. If you would like to jump back. And, apologies.

(Laughter.)

(Simultaneous speaking.)

MS. ARSENAULT: We can hear you, Andrew.

CHAIR BEHAR: Okay. So, Kelvin is then on Deck with Jay. Go ahead, Andrew. Thank you for being patient with us.

MR. DYKSTRA: Maybe if I had hang up my other phone. I was on two lines finally. So, anyway.

Yeah, this is Andrew Dykstra from

NEAL R. GROSS

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

Washington state, dairy farmer. I was a previous, well, a couple of previous, president WODPA. I also spoke to you guys last spring here in Seattle.

I was the one that had said the engines are roaring but the transmission's in neutral.

Anyways, I think since then I would give you a couple of compliments. I think a few things have actually started a little bit in the right direction. So the pendulum is starting to swing the other way. As a dairy farmer, we've been playing under two sets of rules, basically. And some of us have been losing. We've been losing big time.

I think, for the growth of the organic, for people that want to see the organic dairy industry to grow, I think what's been happening the last few years is going to make it tough for it to grow. It's going to actually maybe even shrink due to the fact that people, we're not playing on the same level playing field.

So, anyway, yes, origin of livestock, if you guys don't know about it, I'm very much in

NEAL R. GROSS

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

favor of it. And then hopefully the comment period is not going to drag this out too long.

The other one, pasture enforcement. Hopefully there's more things happening there behind the scenes I don't know about. Personally, last spring I did sign up for one the satellite programs. Very interesting. We've seen what we can see and learn from that. And maybe this afternoon I'm going to sign up for a second one and then I'll compare the two to see how they actually work.

You can see the second one even asked me, how come the ground is so compacted there? And I looked at the picture that they had and its where I had my temporary fencing. So they can see exactly where the ground was more compacted than any other places. So, that was kind of cool.

So, anyways, do you have any questions?

Yeah, and other than that, I apologize for being hard to get a hold of. If you have any questions I would be happy to answer them.

CHAIR BEHAR: Okay. Any Board members

NEAL R. GROSS

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

have questions?

Well, Andrew, you know you do have a chance to make comments on that origin of livestock. I believe that's open until December 5th or 3rd. Something like that.

MR. DYKSTRA: Correct. Yes.

CHAIR BEHAR: Okay.

MR. DYKSTRA: Thank you.

CHAIR BEHAR: Thank you. And that will be anyone could make comments.

Well, next up, then, is Kelvin Bass with Bass Plant Farm. Kelvin, are you there?

MS. ARSENAULT: Harriet, I think we may have skipped a Mike. There were two Mikes in a row.

CHAIR BEHAR: Oh. I'm sorry. Okay.

MS. ARSENAULT: No, that's okay.

CHAIR BEHAR: Mike Hocutt.

MS. ARSENAULT: And Mike Hocutt, I am not sure this is your -- can you try to talk and see if we can hear you?

Alright, I'm going to unmute a number

NEAL R. GROSS

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

that has your area code.

Mike, go ahead and try to talk.

MR. HOCUTT: This is Mike --

MS. ARSENAULT: Hi, Mike. We're having a little trouble hearing you. It's a little - it's just a little muffled. Can you try again maybe?

No, we're not hearing you. Harriet, it seems like Mike is having some audio issues. So, Mike, maybe we can come back to you.

CHAIR BEHAR: Okay, so I'll keep calling for you, but meanwhile let's go to Kelvin Bass.

MR. BASS: Yes, ma'am. Can you hear me?

CHAIR BEHAR: Yes. Great.

MR. BASS: Okay. Okay.

CHAIR BEHAR: Go ahead.

MR. BASS: Okay. I'm actually in the tractor, in the field, so I'm going to stop and talk to you guys just a minute.

My name is Kelvin Bass and I'm with Bass

NEAL R. GROSS

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

Farm Organics and Bass Plant Farm. We're in Nashville, North Carolina. I know I'm at least a third generation farmer and third generation tobacco farmer. And first generation organic farmer.

We have about 350 acres certified organic. We grow tobacco, sweet potatoes, cucumbers, leeks, soybeans are our crops at this time. We're looking for some new crops to add. Tobacco is one of the first ones we started with organically. And the fatty alcohols are very important in our tobacco production.

The alternative chemicals are not preferred by the tobacco company because of the damage it can do to the crop to lower the quality of the crop. And also those products will require more hand labor and potential worker exposure to the chemicals. And then it just would add to the overall chemical -- I mean, labor cost to the crop.

And which would impact the financial stability of that, of the organic tobacco production for us.

And it is a part of our overall crop

NEAL R. GROSS

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

rotation and one of the crops that we count on for income. So it's just important for us to be able to keep the fatty alcohols and to be able to produce organic tobacco. Thank you.

CHAIR BEHAR: Okay, thank you. And I see Emily has a question.

MS. OAKLEY: Thank you. I was wondering if you could help me understand a little bit the history. It seems like many of the speakers are from the North Carolina area and maybe familiar with one another, possibly. Also maybe growing for the same company. Do you know the history of how you all started using fatty alcohol?

MR. BASS: Somewhat. It's always been used on the conventional side for years. Pretty much as long as I can remember. But I'm not sure how it originally got approved. My understanding, the original product is called OTAC.

And it was developed, I think, for the organic market. And I think it was developed using organic, I think, coconut oil. But I think it was developed using organic products, which I think

NEAL R. GROSS

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

led to it eventually being approved for organic use.

I think, as someone mentioned earlier, I think the problem or the question that comes in has been the synthetics, I guess, which would -- I'm not sure, but I assume that goes back to the manufacturing process. And I may not be correct there. But that's my understanding in kind of a broad overview. Does that answer your question, Emily?

MS. OAKLEY: Yes.

CHAIR BEHAR: Okay, anyone else? Okay, are we going back to Mike now, Michelle?

MS. ARSENAULT: Yes, let's try to get Mike. Mike, I see a phone number with your same area code but not quite the number that you provided. So I just unmuted that line. So, Mike, can you try to talk?

No, that might not be it --

PARTICIPANT: They should've asked me that shit because I know it.

MS. ARSENAULT: Hello, hello. I'm

sorry, whoever is talking you are not on mute and we can all hear you. I'm going to mute that line.

Mike Hocutt, I am not seeing you on the list, so we're going to skip by Harriet and I'll continue to --

CHAIR BEHAR: Okay. So, next up is Jay Willard. And on deck would be Richard Enoch and Matthew Vann.

Jay Willard.

MS. ARSENAULT: Harriet, we're not finding Jay on our list by name or by phone number.

Jay, if you are on the line -- he won't be able to talk unless I unmute him. So we are not seeing Jay. I will check my email.

CHAIR BEHAR: Okay. Do you know how to send Michelle an email? I hope you do.

All right, we're going to move ahead. I have marked you and we'll keep calling your name. Richard Enoch? Do you have him there, Michelle?

MR. ENOCH: Yes, ma'am.

CHAIR BEHAR: Oh, and this is Richard?

MR. ENOCH: Yes, ma'am, this is Angelo,

NEAL R. GROSS

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

Richard Angelo Enoch.

CHAIR BEHAR: Okay, excellent. Thank you. Go ahead.

MR. ENOCH: Hello.

CHAIR BEHAR: Hi. Go ahead.

MS. ARSENAULT: Richard, I think we may have lost you. Richard, try to talk again.

MR. ENOCH: Yes.

MS. ARSENAULT: There you go. All right, and if you could start by saying your name and affiliation for the record.

MR. ENOCH: Okay.

MS. ARSENAULT: Thank you.

MR. ENOCH: My name is Richard Angelo Enoch. My farm is Enoch Farm from Mebane, North Carolina. I raise around 20 acres of organic tobacco. I have around 40 acres certified organic, rotate with hay and wheat, and, well, in our area we've been having good luck with the OTAC and using it on our tobacco. And I have never used mineral oil on the crop because we had just started with organic in 2015.

NEAL R. GROSS

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

My grandfather and them used to use mineral oil before, and they told me they just hated it, how long it -- it would let the leaves fall of the -- if you put too much on the crop leaves will fall off, damaging the leaves. So when they let us use it on the organic it was pretty good.

I have raised PRC, that's the crop between organic and conventional, and we used OTAC for about 20 years or more. But I'm just like the rest of the farmers with this. If you do away with it, it's more time consuming and work and I have eight H-2 workers that we working all the time. I raise a lot of acres with tobacco and grain and it helps me a lot with this OTAC.

CHAIR BEHAR: Okay. Do you have -- is that the end of your comments?

MR. ENOCH: Yes, ma'am.

CHAIR BEHAR: Okay. Any questions?

Looks like no questions. I don't see Jessie up there, though.

MR. LEWIS: Harriet this is Paul.

NEAL R. GROSS

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

Could I make just one remark just going back to the origin of livestock comment before?

CHAIR BEHAR: Sure.

MR. LEWIS: Yeah, thank you.

CHAIR BEHAR: Go right ahead.

MR. LEWIS: So I just wanted to mention to Harriet, so thank you for talking about in terms of we recently re-opened the public comment period for the proposed rule, and just remind people that the dates, the deadline for submitting a public comment is December 2nd, 2019.

So there is an organic NSAR (phonetic) that went out. You could also look at regulations.gov, that has the rule, excuse me, the public comment process. So, you know, this really provides an opportunity to re-open public comment and it gives people a chance to submit comments that did not do so in 2015.

And just to remind people, if you've already submitted a comment from 2015 you don't need to re-submit it, unless you have new information. So just to help in terms of giving

NEAL R. GROSS

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

people some guidance and direction of that process.

And thank you, Harriet, for bringing it to our attention.

CHAIR BEHAR: Sure, thank you, for correcting that I had the wrong date there. I knew it was in that first week of December.

Okay, we are now ready to move forward, or go backwards. Is Jay -- Were you able to find Jay, Michelle, Willard or Mike Hocutt?

MS. ARSENAULT: We're not seeing Jay.

CHAIR BEHAR: Okay.

MS. ARSENAULT: Let's see. I am going to unmute the three numbers we have in that same area code. So, let's see. All right, I just unmuted one of the 252 numbers. Mike, is that you out there? Try to say something.

(No response.)

MS. ARSENAULT: No, not him. All right, Harriet, it looks like we have no Mike at the moment and no Jay.

CHAIR BEHAR: Okay, so we're going to move forward.

NEAL R. GROSS

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

MS. ARSENAULT: And Matthew Vann --

CHAIR BEHAR: Right, Matthew Vann,
with Jeff Preddy and Shep Erhart on deck.

MS. ARSENAULT: Matthew, I am unmuting
you. Give me one moment here. Matthew, try to
say something. Unmute. I'm unmuting.

MR. VANN: Can you hear me?

MS. ARSENAULT: We can hear you great
from so far away. Thank you so much.

MR. VANN: Yes. So, thank you for the
cooperation. As I mentioned, I'm in Zimbabwe right
now at a tobacco research conference.

So, a little bit about me. My name is
Matthew Vann. I am a tobacco extension specialist
and assistant professor at N.C. State University,
and in my role I lead the tobacco agronomy and
extension team, again, with extension and research.

So, again, I'm very humbled to
represent the North Carolina Cooperative Extension
Service and about 119 family farming operations
that produce organic tobacco in North Carolina.

So my goal today is to discuss a little

NEAL R. GROSS

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

bit of the research that we have conducted over a two-summer period and talk a little bit about some comparisons we've made of fatty alcohol to other organic substances that have been proposed as possible alternatives for sucker control.

So, in 2018, we compared fatty alcohol to four other compounds, the first being pelargonic acid, the second being vegetable oil, the third being canola oil, and then the fourth being a combination of peppermint oil and spearmint oil.

Suffice to say, we had our best sucker control, ranging from 98 to 99 percent control, with fatty alcohol. Our next best treatment was pelargonic acid; our sucker control ranged from about 83 to 98 percent control.

However, we had substantial injury with pelargonic acid, and I'm aware of at least one product that is OMRI-listed with pelargonic acid as the active ingredient that has a tobacco label from a company known as BioSafe Systems.

So, again, we observed substantial injury from pelargonic acid. With vegetable oil,

NEAL R. GROSS

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

canola oil, and then the combination product of peppermint oil and spearmint oil our sucker control was generally less than about 35 percent, but we did not see any injury.

So, again, we didn't see any major sucker control potential from those oil-based products.

In terms of yield, our greatest yield was obviously observed with fatty alcohol, again, where we have almost complete sucker control and then leaf injury that was less than 3 percent. We saw our greatest yield achieved in that specific treatment. All other treatments were significantly lower in terms of yield and value per acre when we compared the data on those.

So, flash forward to 2019, again, I referenced that we were made aware of a pelargonic acid-based product that does have an OMRI listing, at least for right now, that does have tobacco on the label. We conducted a dose response study, and I have the data summarized from one of those trial locations. We conducted it at two locations.

NEAL R. GROSS

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

The second will be harvested, I believe, this week and will be rated.

Ultimately, in that study we observed that we had a little over 90 percent sucker control with fatty alcohol and 2 percent injury. With our various concentrations of pelargonic acid, they ranged from 1 percent to 7 percent in the first application, and as we increased the concentration we essentially stair-stepped in an upward direction our injury and ultimately observed about 75 percent injury from pelargonic acid and only about 63 percent sucker control.

So we can manage to almost obliterate and completely kill tobacco plants with the pelargonic acid, but we just can't manage to control suckers with it.

So, again, you know looking back through a lot of the literature, there is not really much in the literature in regards to mineral oil or other products at this time.

CHAIR BEHAR: Okay, thank you, and thank you for calling in from such a great distance.

NEAL R. GROSS

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

VICE CHAIR ELA: Harriet, I have a question.

CHAIR BEHAR: Okay, and then Emily has one also. Sure, go ahead, Steve, and then Emily.

VICE CHAIR ELA: We had a presentation in Seattle from a person, I can't remember his name at this point, that said they were in the process of developing a natural sucker control agent you know, with organically acceptable ingredients as an alternative to the fatty alcohols. And I don't recall what the product was, and they may not have said because I think it was -- my understanding is it was in development.

MR. VANN: Okay.

VICE CHAIR ELA: Do you have any knowledge of that or information on that?

MR. VANN: No, sir, I do not. The only products we have been referenced are organic soybean oil, which I think would actually be just a raw soybean oil derived from certified organic soybeans.

We actually tested that product this

NEAL R. GROSS

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

year and found extreme injury and very little control, at least at the rates we evaluated, and then the other would be a -- I guess it is a combination of soybean oil and perhaps some surfactants. However, that product is registered in Brazil at this time, and I do not believe it is registered in the United States. So I would not be aware of that other product that you referenced.

VICE CHAIR ELA: All right. Thank you very much.

MR. VANN: Yes. Well, actually, Steve, can I come back to one comment?

VICE CHAIR ELA: Sure, yeah.

MR. VANN: So, perhaps, and I don't know this, but you may be referring to the peppermint oil and spearmint oil product. We were approached by a company out of Miami. The company was named ExcelAg Corp., and this was in 2018. They presented us with this peppermint oil and spearmint oil product that, again, was potentially in the pipeline, but, as I mentioned before, when

NEAL R. GROSS

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

we tested it last year we did not achieve really any appreciable level of sucker control.

So that may be the one product. That is really the only alternative, new type product that we have been approached with. And, again, I was told by the company that they are working on some formulation issues, but, again, from where I stand today, 30 percent sucker control compared to 98 or 99 percent sucker control is a lot of ground to cover.

CHAIR BEHAR: Thank you, but don't go, Emily has a question.

MS. OAKLEY: Thank you, Matthew. I have two questions. One, could you just re-state the name of the OMRI-listed product that did have tobacco listed for use, just so I can write that down?

MR. VANN: Yes, I can. The product name is AXXE, and that is spelled A-X-X-E. And I think you can literally Google "AXXE herbicide label" and it will take you directly to the company website where you can download the actual product

NEAL R. GROSS

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

label. And on that label you're going to find a number of different crops and use patents, one of which is tobacco sucker control.

And their recommendations per their label were evaluated in field trials by my research team this summer, and we ultimately found that the sucker control was extremely limited and the injury potential was extremely high and we do not believe that to be a suitable alternative.

MS. OAKLEY: Thank you. And then could you also just tell me what the impetus for the study was? And did it start in 2018?

MR. VANN: Yes. So these studies started in 2018 where we specifically were looking at alternatives. However, we have evaluated OTAC specifically as a fatty alcohol and compared it to conventional alcohols for a number of years, probably going back to 2011 or 2012. And, again, the rationale behind that is it's a new product. Obviously, we need to generate data as cooperative extension for our commercial farmers.

So, again, it has been evaluated in

NEAL R. GROSS

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

previous trials and then in 2018 it was to see if there was really and truly anything else out there just in case, you know, we did lose fatty alcohol, what can we recommend to take its place.

MS. OAKLEY: Thank you very much.

CHAIR BEHAR: This is Harriet. I'm just wondering is that material the material that is put out by Sterling Agriculture that you're talking about?

MR. VANN: Which material would that be?

CHAIR BEHAR: The one that is OMRI-listed.

MR. VANN: No, ma'am. I believe it is BioSafe Systems. And the address I had was out of, I believe, Cary, North Carolina, or Pittsboro, North Carolina, if I recall correctly.

CHAIR BEHAR: Yeah, I think we are going to have another webinar commenter from Sterling Agriculture who would like to talk to a natural product, but I think that's going to happen tomorrow.

NEAL R. GROSS

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

MR. VANN: Okay.

CHAIR BEHAR: So we will keep moving unless there is more questions, which I don't see and next --

VICE CHAIR ELA: Harriet --

CHAIR BEHAR: Yes, go ahead, Steve.

VICE CHAIR ELA: Could I just ask if you have any data that you could submit to the NOSB or to Michelle. I know it's from 2018, but some of those tables on, you know, the other oils, the alternatives for the fatty alcohols, if you would have them handy it would be great to have them in our public record.

MR. VANN: Absolutely, Steve. And just for clarification I have submitted written comments to the NOSB via the Federal Register twice and those tables and that data are included in those as well.

So if I need to re-send them I can happily send them directly to Michelle, or if you already have access through there, either way is fine with me.

NEAL R. GROSS

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

VICE CHAIR ELA: As you can tell, I haven't finished reading all my public comments yet, so if they are in the public comments that's awesome. I appreciate you putting those in.

MR. VANN: Absolutely.

CHAIR BEHAR: Okay, anyone else?

(No response.)

CHAIR BEHAR: Thank you. Thank you, and thank you for your written comments as well.

MR. VANN: Thank you.

CHAIR BEHAR: Jeff Preddy is up next, with Shep Erhart and Amber Pool on deck. Can you find those people, Michelle?

MS. ARSENAULT: Yes. Jeff, your mic should be unmuted now so you should be able to talk.

MR. PREDDY: Okay. Can you hear me?

MS. ARSENAULT: Great. We can hear you great.

CHAIR BEHAR: Yes.

MR. PREDDY: You can. Good afternoon. My name is Jeff Preddy. My brother and I operate Preddy farms and we manage a little over 1,100 acres

NEAL R. GROSS

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

of certified organic crop land located just north of Raleigh, North Carolina.

There are 61 different parcels scattered around in three counties and almost all of it is small fields and a lot of poor soil and it's all -- just about every bit of it is rented from all farm landowners.

Our main crop is organic flue-cured tobacco. We also grow 50 acres of organic sweet potatoes and bale about half of our small grain cover crops for organic hay.

The three and four year rotation we keep requires us to rent so much crop land. In 1998, we made the transition to organic tobacco as a way to survive in the tobacco long-term. We were grateful for the opportunity presented to us from the new company that moved into our county. Conventional crop production in our region of the state was no longer practical as most of the soil types we have are suited for tobacco and about the only other thing else is septic systems.

I say that because there is no going

NEAL R. GROSS

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

back. Organic tobacco is what you keep. It pays all the overhead costs, like the housing for the labor, the land rent, machinery repairs, and toward the other crops. If we don't grow organic tobacco, we don't farm. We would not be able to pay landowners enough rent for them to keep the land out of development.

We are in the middle of the fastest growing real estate market in the country. Land values have skyrocketed along with property taxes, and without the ability to defer those taxes for farm use the landowners simply will not keep the land and the farming tradition in this area will just -- it will just be gone.

You've heard all about the importance and the safety of having fatty alcohols available for use as an organic input. Forty years ago when I went to the grocery stores to buy all the cooking oil they had on the shelves I would always get asked what are you doing, are you going to have a fish fry or something, and, you know, they'd look at me crazy when I told them I was putting it on organic

NEAL R. GROSS

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

tobacco. So I got tired of explaining that process at the cash register and just learned to say, yeah, I'm having a fish fry.

So, like I said, there's no going back.

Labor costs have more than doubled what they were 20 years ago, along with everything else. The price that I'm selling my tobacco for in 2019 is less than it was in 1998. So that's just my main point and I thank you for your time.

CHAIR BEHAR: Okay, thank you. I don't see any questions, except I can't see if Steve raises his hand, but he's not saying anything so let's move on now to Shep Erhart with Maine Coast Sea Vegetables. Can you find him, Michelle?

MS. ARSENAULT: Yes. Shep, your mic is on.

CHAIR BEHAR: Okay. And on deck is Amber Pool and George Ibrahim.

MR. ERHART: Am I on now?

CHAIR BEHAR: Yes. Is this Shep?

MR. ERHART: Yes, this is Shep.

CHAIR BEHAR: Hi, great. We can hear

NEAL R. GROSS

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

you. Go ahead.

MR. ERHART: Good. It looks like I am the first commenter from the seaweed community. I hope the Board is ready for a radical change in scenery.

I appreciate the Board's concern about the sustainability of seaweed harvests worldwide.

I believe you'll be hearing from other members later much more qualified than I am and familiar with the science of seaweed, but I'll do my best to introduce you to what I know, which is I'm really speaking from someone who's been running a small company here in the Bar Harbor region for about four decades now. And I've been watching closely the cycles of the season and I'm watching my harvesters return every year to the same beds and take a modest amount of seaweed, and from those observations I don't believe we have a sustainability issue here in Maine.

In fact, in 1993, I helped develop the first organic standards for seaweed with OCIA, with the intention of engaging harvesters as stewards

NEAL R. GROSS

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

not trying to regulate them. I believe they are actually the gatekeepers to sustainability as they don't really want to jeopardize their livelihood, just given the right information and paid fairly.

So far that's working well, as least for my harvesters who harvest very little rockweed, to be true about it, honest. We harvest mostly kelps and dulse. But as president of the Maine Seaweed Council for a decade I got to know some of the rockweed companies well here in Maine and found that they, too, had been returning to the same beds for almost as long, and, obviously, had developed sustainable harvesting practices that worked well for their harvesters over the decades.

So, yes, it's true, and I'm sure you have heard that rockweed landings have been rising over this past decade, about 13 percent a year, actually. But even the highest year's landings as a percent of the estimated total amount of rockweed on the coast of Maine is less than 2 percent.

You know, of course, if all that came

NEAL R. GROSS

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

from one area we'd definitely have a problem. Is this modest amount of harvest having an impact? I'm sure it is. Is it destructive to the environment? I believe the answer is no, and I'm not alone. You'll hear from other members of the community.

And also several years ago the Department of Marine Resources convened a group of marine scientists, harvesters, and conservationists to review all the rockweed harvest impact literature and science. Over a two-year period they produced a detailed rockweed management plan dividing the coast into sectors and establishing a maximum sustainable harvest rate of 13 percent per sector and a minimum cutting height of 16 inches to ensure sustainable growth.

Oh, I'm hearing a lot of squeaking. Am I still on? Can you hear me?

CHAIR BEHAR: Yes.

MS. ARSENAULT: Yes. That's actually the timer marking the end of your comments.

MR. ERHART: Oh, dear.

NEAL R. GROSS

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

(Simultaneous speaking.)

CHAIR BEHAR: Your three minutes went quickly.

MR. ERHART: It did.

CHAIR BEHAR: But I do see a -- yes, it did, and thank you for joining us. Emily, you had a question?

MS. OAKLEY: Well, I have two. One, could you finish your sentence or your thought there? And then I'll ask my next question.

MR. ERHART: Well, to sum up, I believe that we don't need organic certification to maintain our sustainable practice here in Maine.

And if the NOSB is concerned about sustainable harvest in other parts of the world, I would advise they proceed with caution because every bioregion, every bay, every species is very different, obviously. One size does not fit all.

So I think a better solution is to perhaps require the use of certified organic only when available, as you do with animal and human inputs.

NEAL R. GROSS

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

MS. OAKLEY: Well, that's funny that I asked you to finish that statement because that was actually going to be my question: what are your thoughts about requiring organic certification for crop fertility inputs, which you answered you don't think is necessary in Maine.

But are most of your, or all of your, products that you sell certified organic? And if so why do you think that's not something that would be desirable for crop fertility inputs?

MR. ERHART: Yes. The answer is yes to the first; all of our products are certified organic. And as I said earlier, I'm using organic certification more as educating my harvesters and making them responsible, in many ways, for sustainability, because I think sustainability is very hard to define. The nuances of -- if you're going to use a third party, for instance, and there are several third party certifiers out there, the metrics for sustainability is still, in my opinion, underdeveloped and still not reliable.

So that's part of the reason why I think

NEAL R. GROSS

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

going ahead to try to tie sustainability into organic certification, I think it's too early and there is still a lot more development of the nuances of the metrics of sustainability.

MS. OAKLEY: Harriet, could I do a quick follow-up?

CHAIR BEHAR: Go right ahead.

MS. OAKLEY: Yeah, I just want to clarify that the Board is not looking at adopting any sustainability terminology or standards, simply because, as you said, it's an undefined or under defined area. And if you are looking at sustainability, it's those three tiers, economics, social justice, and environmental, and as you know our purview would just be the environmental.

So I think we would be looking at options, for example, requiring organic certification, not to try to address sustainability per se, but to address environmental impact and to ensure that the harvest is minimizing the environmental impact.

So if you want to comment on that you

NEAL R. GROSS

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

can, or I can just end my comment there. Thank you for calling in, Shep, I really appreciate it.

MR. ERHART: Well, I do. Environmental impact is equally slippery, as far as I am concerned, as sustainability is. Again, you know, the metrics, again, are still being developed -- for seaweeds, anyhow -- and I think, yes, more work can be done, but I think right now the scope of the NOP should not include environmental impact for this particular input. Or, if it's going to, it needs to be included for all the inputs, which I think is pretty unrealistic. So, that's my two bits.

MS. OAKLEY: Okay. Harriet, just one final follow-up. Sorry.

CHAIR BEHAR: Okay, Emily.

MS. OAKLEY: Okay, sorry. Yes, I mean we are supposed to ensure that all materials used in organic production have limited environmental or human health harm. The extent to which we can explore that for every non-synthetic material that's used is obviously very challenging. And

NEAL R. GROSS

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

this is really probably one of the first in-depth looks that I'm aware of that we are attempting to do that. But it is part of our regulations. So what we are trying to do is just ensure that we are, they are following them. But thank you. I really do appreciate your time.

MR. ERHART: I think there will be some other commenters who will be more willing to delve into the environmental impacts, so I'll leave it at that.

CHAIR BEHAR: Okay, thank you. Anyone else? Doesn't look like it.

Amber Pool with CCOF. And then George Ibrahim is on deck with Kendra Klein after that. Do you have Amber, Michelle?

MS. ARSENAULT: Yes, Amber should be unmuted. Amber, can you try to say something so we can test your mic?

MS. POOL: Hi. Can you hear me?

MS. ARSENAULT: Yeah, a little faint, but go ahead, we can hear you.

MS. POOL: Hi. I'm Amber Pool. I

NEAL R. GROSS

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

work for CCOF Certification Services in our farm department. I appreciate the opportunity to give comments to the NOSB Board via this webinar.

Thank you to the Crop Subcommittee for your work on reviewing paper pots and other paper crop production aids. While CCOF didn't previously allow our growers to use the paper chain pots that initiated the petition to allow paper pots, we are very supportive of the allowance of paper products on farms.

We encourage the development of regulations to help farmers use less plastics on farms and it's important for certifiers to have clear and robust regulations to review paper inputs, too. Thank you.

CHAIR BEHAR: Any questions? I have one question.

(Simultaneous speaking.)

CHAIR BEHAR: Oh, go ahead, Steve.

VICE CHAIR ELA: Go ahead, Harriet. No, I'll ask mine after yours.

CHAIR BEHAR: Okay. I guess I was

NEAL R. GROSS

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

wondering, there are paper pots that have not even asked to be approved under organic and they are mostly, if not 100 percent, synthetic fibers, things like polyesters, that don't break down very readily in the soil and can remain for many years.

I'm wondering -- so this is what we have been struggling with, is to allow something that will break down with little to no negative impact on the soil as it's breaking down, or the environment, and just wondering how you feel about synthetic fibers in the paper pots, because paper is not just cellulose these days.

MS. POOL: Correct. And so that's why the certifiers would need really clear standards to review it. I'm not crazy about any synthetics in the paper pots, but from what I understand, and it sounds like what you guys understand, too, is that you know, it's not 100 percent synthetic-free.

So we just need really clear standards of what we can and can't approve, but definitely supportive of farmers using less plastic pots on farms and plastic materials. So whatever we can

NEAL R. GROSS

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

do to work towards that would be great.

CHAIR BEHAR: Okay. Go ahead, Steve.

VICE CHAIR ELA: Yeah, I guess I had a similar question, but, I mean, we're also looking for, you know, if -- well, should we allow any synthetics or not, synthetic fibers or not? But the other question, though, is, you know, should we apply like an ANSI standard to biodegradability, you know, biodegradation of those fibers? And we kind of put that in our discussion document and I wondered if you have any thoughts on that.

MS. POOL: It's always hard when our regulation references another regulation, because that might change, but if that's the best that's out there it might be suitable.

And, also, you know, I wouldn't want to see, you know, paper pots be allowed if they're, you know, 100 percent not synthetic, because we know that it's not going to be available for the growers out there.

So, whatever we can do to move forward to allow some paper use on farms for the paper pots.

NEAL R. GROSS

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

And, yeah, I'm just happy that we're having the discussion and I totally understand the difficulties. And so, you know, as a certifier, you know, we need to be really clear, like, what we can and can't allow as far as the percentage of synthetic in the material.

CHAIR BEHAR: Okay. Thank you.

MS. POOL: Thank you.

CHAIR BEHAR: Thank you. Next up is George Ibrahim and on deck is Kendra Klein and then Vanessa Hornai.

Did you find George, Michelle?

MS. ARSENAULT: Harriet, we have not found George on the line by name or phone number here. And Kendra had a competing conference call and was possibly going to be late. And it looks like we're just -- I think we're just on time, actually, or maybe a little earlier than she expected. But I expect her to be with us but I told her we would come back around at the end and call any names.

CHAIR BEHAR: Okay. I made a note of

NEAL R. GROSS

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

that.

MS. ARSENAULT: Okay, great.

CHAIR BEHAR: Okay. So we are on to Vanessa Hornai. And then Amber Sciligo with the Organic Center. Amber and then Sean Mallet. And those would be on deck with Vanessa Hornai next.

MS. ARSENAULT: Vanessa. I am not seeing Vanessa either.

CHAIR BEHAR: Do you got the phone number there, 630 area code?

MS. ARSENAULT: Yes, not finding Vanessa either. Amber is here because I saw --

CHAIR BEHAR: Amber. And maybe Amber you can tell me how to pronounce your name so I don't --

MS. ARSENAULT: All right, Amber, give me one second, I'm allowing you to talk.

DR. SCILIGO: Hello. Can you hear me?

MS. ARSENAULT: Yes, we can hear you great. Great.

CHAIR BEHAR: How do you pronounce your

--

NEAL R. GROSS

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

DR. SCILIGO: Sorry my last is pretty challenging, but it's easy in that it's a silent "C" like the word science, and I'm a scientist, so it's an easy thing. So my name is Dr. Amber Sciligo. I am the science program manager for the Organic Center and I will be submitting comments on our organization's behalf.

So, just as some background, the Organic Center is a non-profit organization and our mission is to convene credible evidence-based science on the environmental and health benefits of organic food and farming. And we also communicate findings to the public.

We are a leading voice in the area of scientific research about organic food and farming and we cover up-to-date studies on sustainable agriculture and health while collaborating with academic and governmental institutions to fill knowledge gaps.

We thank the Materials Subcommittee for this comment period on research priorities and support the Subcommittee's proposed 2019 research

NEAL R. GROSS

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

priorities, which we believe are in line with the needs of the organic industry.

Based on feedback that we have received during our own outreach efforts we would also like to suggest that the research areas of soil health, climate change, and pathogen prevention and protection be prioritized in 2019. And I will expand on these topics next.

So, with regard to soil health, the Organic Center is currently collaborating with researchers from the University of Maryland to conduct a review of the most current science that looks at organic-compliant methods for optimizing soil health.

This work is the beginning of a larger effort that we believe is needed to not just compare soil health on organic and conventional farms but to also identify the specific practices that will contribute to organic stability to better support soil health.

We also need a better understanding of the variation that exists when we characterize soil

NEAL R. GROSS

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

health and the differences in the indicators that are used to assess it within the scientific literature. We need more research to identify science-supported best practices to maintain and build soil health in organic systems while also accommodating variation that exists in the local conditions, such as geography, climate, soil type, and crops.

For climate change, climate change is very obviously having serious consequences on our environment and our public health and we believe that food systems are especially vulnerable to climate change. We thank NOSB for considering climate change as a research priority in 2019 and the Organic Center is already engaged in climate research to examine specific aspects of organic that contribute the greatest benefits to climate stability.

Some of these net benefits include carbon sequestration in the soil as well as reduced energy usage by not using synthetic nitrogen fertilizer, which is a huge driver of energy use.

NEAL R. GROSS

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

However, we believe additional research is needed to pinpoint specific strategies that organic farmers can take to reduce greenhouse gas emissions, increase carbon storage in the soils, and respond to current climate challenges that are threatening our food security.

And, finally, we thank NOSB for their support of research on food safety and recommend continued support for research in pathogen prevention and protections. We need more research, extension, and education to fully understand the relationship between on-farm biodiversity and food safety and this research must be communicated to third party food safety auditors and incorporated into their audit. Is that my time?

CHAIR BEHAR: Yes, it is.

MS. ARSENAULT: That was the timer, yes. Thank you.

CHAIR BEHAR: Any questions?

(No response.)

NEAL R. GROSS

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

CHAIR BEHAR: Thank you to the Organic Center and all of those supporters for the good work that you do.

DR. SCILIGO: Thank you.

CHAIR BEHAR: Next up is Sean Mallet with Cynthia Daley and Jennifer Beretta on deck. Do you have Sean?

MS. ARSENAULT: Sean, give me one moment. I'm attempting to unmute your mic here. Okay, Sean, you should be able to --

MR. MALLETT: Thank you.

MS. ARSENAULT: Yes, we can hear you great. Thanks.

MR. MALLETT: Thank you. Good afternoon. My name is Sean Mallet with Harmony Organic Dairy in Twin Falls, Idaho. I'm also a past director, vice president, and president of the Western Organic Dairy Producers Alliance. My wife Stacy and two sons also work on the dairy here and we've been certified organic for 13 years.

Today I would like to talk to you about three critical items concerning the organic dairy

NEAL R. GROSS

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

industry in the U.S.

Number one and top priority is origin of livestock final rule finalization and implementation. In 2015, the NOP released a proposed origin of livestock rule which would close unfair loopholes that some organic dairies have used to continue to expand their milking herds.

In 2015, over 1,500 comments were received and 99 percent of those comments were in favor of implementation of the proposed rule. As you know, the rule was never finalized and has sat on a shelf somewhere gathering dust.

In the meantime, hundreds of millions of dollars in actual value have disappeared from actual organic dairy farms and actual families. The value that has been lost due to the depressed farm gate milk prices because of the increased supply created mainly by transition animals.

In the last four years, the organic dairy market at retail level has been relatively flat. So when an increased supply hit due to an increased amount of animals due to a lack of a clear

NEAL R. GROSS

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

and finalized rule milk prices dropped by as much as 30 percent on farm, which is well below the cost of production.

There is also disparity in the cost of raising an organic animal from birth and continuously transitioning animals from a conventional system. The disparity between a last-third-of-gestation animal, a true organic animal, and a transitioned animal is \$800 per head.

This begs the question: if you can't raise calves and heifers utilizing organic methods should you be allowed to milk cows organically? Is the operation fully competent to be an organic dairy?

Since 2015, on my farm, I have personally lost millions of dollars in equity over the last four years. I ask the NOSB to please recommend to the NOP the finalization and immediate implementation of the proposed origin of livestock rule. Consumers expect a final rule, organic dairymen expect a final rule, and it will help maintain the integrity of the organic seal.

Second, I'd ask that you support the

NEAL R. GROSS

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

enforcement of grazing requirements. This is another area that I would encourage the NOSB to ask the NOP to improve. Technology, such as satellite imagery to monitor pasture quality and cattle movements, exists right now and can be implemented in relatively short order. I encourage the NOSB and NOP to continue consider utilizing this advanced technology.

Training of inspectors and certifiers about how to measure meaningful grazing systems on organic dairies is also a major importance. Because the consumer expects, and the organic law mandates, that appropriate grazing is occurring on all organic dairies, proper grazing enforcement is critical.

Consistency among certification agencies about how grazing requirements are being enforced across the country is critical to maintaining the organic seal. as well as leveling the playing field amongst all organic dairies, large and small.

Third and last, regarding the

NEAL R. GROSS

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

substances up for review, as an organic dairy farmer the welfare of our animals is number one priority.

I ask that you please leave the few tools and treatment options that we have available to use in times of illness on the list of approved substances.

I would also suggest that a National List of approved products, such as the one that OMRI uses, be implemented across all certification agencies. There are still occasions of one certifier allowing substances and another certifier won't. This playing field also needs to be leveled so that all ACAs are working from the same playbook.

I think you for your work and for your time.

CHAIR BEHAR: Thank you for your well-spoken comments there. Anyone have any questions? I have a question. I'm an organic inspector, and do quite a few dairies here in Wisconsin.

And I notice that when young stock are also out, are raised organically and are out on

NEAL R. GROSS

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

pastures, that they are better grazers when they grow up and actually are more economically beneficial to the operation, because they have grown up in an organic system and then, can thrive and be highly productive in that system.

Do you find that with your young stock too? You think that raising animals organically ends up, it's not just to meet the rules, but it actually helps you in your operation later? Or is that just something I see that isn't really true?

MR. MALLET: A hundred percent, ma'am.

As a young animal goes out to grass and develops to consume and gain energy from high forage diets, that is definitely a benefit to get them on the grass early.

And so, yes, we're required, anything above six months of age needs to be out grazing and adhere to the grazing requirements of the National Organic Program. So, I definitely see that.

In addition to that, just the added movement and exercise that the animals receive at

NEAL R. GROSS

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

a very young age, it's like children growing up exercising, they're generally in better health, and we've definitely seen that on our farm.

CHAIR BEHAR: Okay. Thank you. All right. Next up --

MR. BRADMAN: Harriet --

CHAIR BEHAR: -- is --

MR. BRADMAN: Harriet, I have a question.

CHAIR BEHAR: Yes? Go ahead.

MR. BRADMAN: It's Asa speaking. I --

CHAIR BEHAR: Hello Asa.

MR. BRADMAN: Hi.

CHAIR BEHAR: Go ahead.

MR. BRADMAN: You mentioned that there's some certifying agencies that approve one treatment, disease treatment, and not another. Do you have any specific examples of that?

MR. MALLETT: You know what, I apologize, not directly in front of me, but I know that it has happened. Just as an example, our certifier years ago wouldn't allow a product, but

NEAL R. GROSS

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

it was being used by a couple of Midwestern-based certifying agencies. So, I can only give that anecdotal evidence at this time, I don't have the specific product right in front of me.

MR. BRADMAN: Thanks.

MR. MALLETT: You bet.

CHAIR BEHAR: Okay. Anyone else?

MR. RICE: Harriet, this is Scott.

CHAIR BEHAR: Go ahead, Scott.

MR. RICE: Hey, I just wanted to offer, on the heels of that comment, when we do have a difference in opinion or position on a particular material or treatment, that is something that we have a process for with the NOP.

And it's important that we -- well, the certifiers can work through those and, when necessary, work through that sort of thing with the NOP.

And we would just encourage you to raise that issue when it happens with the certifier, and if you're not finding resolution there, to raise it to the NOP and we can have that discussion amongst

NEAL R. GROSS

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

our certifier colleagues and the NOP and come to some resolution there. But just wanted to offer that there is a process there.

MR. MALLETT: Thank you, Scott.

CHAIR BEHAR: Sorry, any other comments?

Thank you, again. So, next up is Cynthia Daley from CSU in Chico.

MS. ARSENAULT: Harriet, it's Michelle.

CHAIR BEHAR: Oh, that's Michelle.

MS. ARSENAULT: Cynthia cancelled, so she is not on the call. And we are not seeing the next several speakers. Jennifer Beretta. We're a little ahead of schedule, I have, just to do a time check, I have 3:00 Eastern at the moment. So, we're a little ahead and sometimes people don't dial in until it's their exact time. So, we don't see Jennifer. We don't see Carmen. If either any -- or Martin.

If any of you guys are on the line, I'm not finding your name or phone number, you can email me or text me on my work cell, it's 202-997-0115, and we'll get you at the end of the comments.

NEAL R. GROSS

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

CHAIR BEHAR: Has Kendra joined us?
Kendra Klein?

MS. ARSENAULT: I haven't seen Kendra
join yet.

CHAIR BEHAR: Okay. So, let's --

MS. ARSENAULT: So, how about Jennie
Landry?

CHAIR BEHAR: Jennie, are you there?

MS. ARSENAULT: I know we're early and,
unfortunately, that's a hindrance sometimes.
Jennie, I'm not -- or Marie? Jennie, I think I
see a same number in your area code, it looks like
an exchange number, so let me unmute you. Jennie,
can you talk?

MS. LANDRY: Hello?

MS. ARSENAULT: There we go. Hi,
Jennie. All right.

MS. LANDRY: Hi.

MS. ARSENAULT: Harriet, I'll let you
take control now.

CHAIR BEHAR: Yes, go ahead, you can
speak and give us your three-minute comment.

NEAL R. GROSS

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

MS. LANDRY: Okay, great. My name is Jennie Landry. I represent DSM Nutritional Products, the world's global leader in production of omega-3, EPA, and DHA based products. DSM strongly recommends a relisting of fish oil to the National List.

A relisting of fish oil is critical for the continued use as a nutritional ingredient in organic certified products. This is because organic fish oil is not commercially available, due to the absence of organic production standards for aquaculture.

Fish oil contains omega-3 fatty acids, EPA, and DHA that contribute to human health through all stages of life. The benefits of omega-3s are proven by science spanning decades and are supported by many international health authorities.

Organic consumers recognize the benefits and should have access to value-added organic products. It is important for organic food manufacturers to remain competitive in the

NEAL R. GROSS

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

marketplace.

In public comments opposing the relisting of fish oil during the sunset review, there seems to be concern about the level of contaminants and safety of consuming fish oil. I will reiterate that fish oil as a nutritional ingredient in organic food is 100 percent safe and has been proven to be generally recognized as safe with no FDA questions.

Fish oil must be manufactured according to HACCP principles, where any potential hazards, including contaminants, are addressed and controlled. Fish oil manufacturing processes consist of several refining steps, including molecular distillation that uses very high temperatures to destroy environmental contaminants.

On top of the manufacturing controls, DSM carefully selects starting crude oils based on a critical evaluation of the supplier's quality and safety systems, which are all verified by a full spectrum of contaminant testing prior to any

NEAL R. GROSS

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

introduction into our supply chain.

Finished refined oils are also verified to meet the strictest global regulatory limits for PCPs and heavy metals, amongst others. All DSM fish oils adhere to GOED's fish oil monograph that sets limits for industry.

Fish oil for human consumption is a byproduct of the fish meal or edible canning industries, which would otherwise be treated as waste. No fish are caught for the exclusive production of oil for use as a nutritional ingredient in organic foods.

Fish oil as a human nutritional ingredient is a good thing for sustainability worldwide, because our industry serves people who care about the marine environment and will choose products consciously.

This drives our industry to be more accountable and set high standards for sustainability, as well as implement programs that promote and protect our marine environment. A strong fish oil industry has a voice to influence

NEAL R. GROSS

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

our suppliers and fisheries to do the same, which can be further strengthened by an annotation addressing sustainability for fish oil on the National List.

So, in closing, DSM strongly recommends relisting the fish oil. I'd like to thank you and the NOSB for your time and opportunity to provide comment in this webinar.

CHAIR BEHAR: Thank you. Any comments from Board members? Well, that's surprising. Well, I guess I'll just make one comment and that is, one of the things that we struggle with is, when there is an issue, similar with fish oil where heavy metals or other contaminants, when we rely on another agency or organization or voluntary type of standards, those things can kind of move around and maybe change from when we first thought that they were acceptable.

And so, we don't want to add a lot of extra layers of regulation, but we also want to make sure that we protect the organic label and seal and make sure that what we are selling under

NEAL R. GROSS

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

that seal meets all the criteria for the Organic Food Production Act.

So, we're struggling with this, in that we understand that many consumers would like this product, but we also know that we are somewhat trusting the other types of certifications or voluntary standards for the protection of the cleanliness, for lack of a better word, of the products.

MS. LANDRY: Right. I guess I'll add one comment to that, is that, for fish oil, as a -- how it's intended to be in organic products, has to be manufactured to any other food ingredient standard.

It has to be safe. And our process is determined -- and our manufacturing process control that as well. I think some of the concerns may stem from using supplements at higher doses or even concentrated versions of fish oil.

And while DSM products have no safety concerns at that level anyways, when used as a nutritional ingredient in food, it's

NEAL R. GROSS

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

nonconcentrated oil, it's natural forms of oil, and it's at lower doses than you would take as a supplement. So, the fact that -- how it's being used in organic food is just also -- gives you extra assurances that it's safe for consumption.

CHAIR BEHAR: Any other comments from Board members? Okay. Do we have Kendra, Jennifer, or Carmen yet, Michelle?

MS. ARSENAULT: Not that I'm seeing. How about if we come back to them at the end?

CHAIR BEHAR: Okay.

(Simultaneous speaking.)

CHAIR BEHAR: Next up, is Marie Burcham there, with Cornucopia?

MS. ARSENAULT: Yes. Marie, we're unmuting you. Marie, can you try to say something?

All right. Marie, I'm going to try to unmute your phone instead, let's see here.

MS. BURCHAM: Can you hear me now?

MS. ARSENAULT: Ah, we got you, there you are.

MS. BURCHAM: All right. Sorry, I was

NEAL R. GROSS

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

on the phone, because my headset does not give good sound quality.

MS. ARSENAULT: We understand. Thanks.

MS. BURCHAM: Sure. My name --

CHAIR BEHAR: Okay. Marie, you can go ahead now.

MS. BURCHAM: Okay, thank you. My name is Marie Burcham and I am an attorney and the Director of Domestic Policy for the Cornucopia Institute.

We stand by the fact that the organic label isn't just about substitution of inputs. The rules and regulations make that clear, but the industry has moved away from this holistic practice.

We urge the NOSB to continue to work towards organic rules and regulations that support economic justice for family farmers, livestock, animal welfare, and environmental stewardship. Families rely on the organic label to provide transparency in how their food was produced.

Where some individuals choose organics

NEAL R. GROSS

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

because it supports principles, others use the organic label out of necessity due to health issues.

The organic label promises consistency in livestock treatment, sustainability, and lower toxic inputs for these consumers.

Right now, many certified organic producers are not meeting that promise. For example, when the Organic Livestock and Poultry Practices production rule was discarded, it was clear that the NOP was rubber-stamping industrial poultry production.

These confinement-based poultry businesses are breaking the current organic rules because, at a basic level, every bird does not have access to the outdoors. We urge the NOSB to continue to push these issues and be the mouthpiece of the public.

Under the organic rules and regulations, poultry often receive poor treatment.

Despite the withdrawal of the OLPP, a rulemaking in this area is still appropriate and needed in this industry. NOSB can also do their part and

NEAL R. GROSS

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

push for better livestock policies that emphasize time spent outdoors for every individual animal.

Cornucopia also wants to see fair competition under the organic seal. That means that there must be uniform application of OFPA and the organic rules and regulations. Right now, there is significant inconsistency among the accredited certifiers that makes this fair competition impossible.

One of the glaring instances of this inconsistency is how hydroponics has been approached. There are no rules regarding organic hydroponics. But even without these rules, some certifiers disregard or continue to disregard transition times and other issues that are already in the rule.

We look forward to hearing an NOP clarification on the hydroponic issue transition times at the meeting, but the problem of inconsistent application of organic rules still needs to be cured overall.

Family farmers, the lifeblood of the

NEAL R. GROSS

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

organic industry, are losing their farms in record numbers. This is particularly true of family-scale dairies and others in the organic livestock industry.

We urge the NOSB to act on these issues to the extent they can. For example, we support the 2010 recommendation and requirements to foster soil fertility in both livestock and crop production. Where there is inconsistent application of organic rules, guidance or rulemaking may be necessary and we support that.

Cornucopia has also submitted written comments that we hope the NOSB will consider moving forward. We are looking forward to seeing the products of your hard work in the coming years. Thank you so much for your time and dedication to this public process. We appreciate it.

CHAIR BEHAR: Okay. Okay, thank you.

Any -- I see Ashley has a question. Go ahead Ashley. I think you're still on mute, Ashley.

MS. ARSENAULT: Harriet, I'm unmuting her. Let me --

NEAL R. GROSS

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

CHAIR BEHAR: Oh, okay.

MS. ARSENAULT: She said she's on her phone now, let me find her phone. Ashley, I'm not seeing your phone in my list here. There you are, got you. All right, I'm unmuting you. Okay.

MS. SWAFFAR: Hi, can you hear me?

MS. ARSENAULT: We can hear you, now, great.

MS. SWAFFAR: So great. All right. Marie, thank you so much for your comments. Thank you for bringing up OLPP again, many of us are still passionate about seeing that rulemaking come forward. I have some questions on your written comments, in regards to methionine.

MS. BURCHAM: Sure.

MS. SWAFFAR: You had said in here that many family-scale organic poultry farms do not supplement with synthetic methionine at all, could you elaborate more on that and tell me how many, what size, more details on that statement?

MS. BURCHAM: Yes. So, this is just information we received from our farmer members

NEAL R. GROSS

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

and just farmers in general that we converse with all the time as part of our work at Cornucopia Institute.

And I would say the scale of farmer that is not supplementing any is on the smaller side.

So, around 200 to 500 birds, for broilers, and around that size for laying hens as well, maybe scaling up a little bit more depending on their practices.

And the big difference we see with these farms is they have excellent outdoor foraging opportunities. So, we're talking pasture rotation, the animals are always on good vegetation.

We have some farmers who let their -- run their poultry through their spent vegetable fields, for example, and they're digging up a lot of invertebrates and have other food sources. And all of these farmers have categorically said they do not need synthetic methionine. They are able to maintain the same level of production and it's just not something that they need at all.

NEAL R. GROSS

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

And for the larger farms we've spoken to, a lot of them are very interested in decreasing what they do use, and they use less than the maximum allowed. And they're looking into alternatives like black soldier fly larvae and other things that would supply that methionine.

And they do think that it's not necessary at the level it's currently allowed. And those larger farmers have by and large been open with us, saying that they would be okay with lowering that amount, or hopefully having more research into alternatives, because we do think that there are alternatives on the market that are just not being utilized right now.

So, that's what we've seen. Just in general, we feel that the methionine is being used to boost production unnaturally. It is an essential amino acid, but if they're actually out there foraging outdoors, as they should be under the organic label, it's not necessary.

MS. SWAFFAR: Great. I've got some followups. Harriet, is that okay, can I followup

NEAL R. GROSS

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

on some questions?

CHAIR BEHAR: Absolutely, go ahead.

MS. SWAFFAR: Okay. So, those farms that you talked about that don't need any methionine, that are out foraging in a pasture-based model, where are those farms located and what happens in the winter?

MS. BURCHAM: Yes. So, a lot of the broiler farms of that size do not produce during winter. So, they only raise broilers during the seasons that they can be outdoors.

But of course, hens, what usually happens is they bring -- they either -- they do their crop cull in fall or before winter, if they need to, or they cull their flock as needed. And then, over-winter birds indoors or, honestly, keep them with access to outdoors year round.

So, I have some producers I know of in the Pacific Northwest and the West Coast that are able to have them with legitimate outdoor access year round.

Those folks that I mentioned that run

NEAL R. GROSS

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

their birds on their spent vegetable crops, if they're a diversified farm, that's what they do in the winter. They run not necessarily on rotated pasture, but they run it on their weeds and their dead organic vegetable crops. And they generally do pretty well on that it seems, from what we've been hearing.

So, I've seen this going on all over the country. We've had farmers in the Midwest, Wisconsin comes to mind. I could get a list of farmers that we see being able to do this, if that would be helpful.

But again, these are smaller scale farms, so they're a little bit more adaptable, I feel, than an industrial sized operation with 200,000 birds. There's just no way you can have legitimate outdoor access if you have a gigantic barn with 200,000 birds.

We don't feel that's organic or represents organic because individual animals cannot get outside if you have that many birds in a barn that size.

NEAL R. GROSS

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

MS. SWAFFAR: Great, okay. So --

MS. BURCHAM: Does that help?

MS. SWAFFAR: Well, I mean, your comment there made me kind of realize that we would have only production in certain periods of the year and in certain parts of the country, if we eliminated methionine from the diet, and that makes me very nervous.

But my next question is, you stated in there that methionine is not needed, because the European Union doesn't allow synthetic methionine.

Are you aware that they allow five percent of their poultry diet to come from non-organic sources? So, possibly GMO crops, crops with herbicides that have actual higher naturally occurring methionine in them.

MS. BURCHAM: Yes, I am aware of that.

And one of the big questions is, alternatives are available as well. So, I realize that that is the case, but you're not going to get enough methionine from, say, feeding corn, which is higher methionine at only five percent, even if you're feeding

NEAL R. GROSS

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

conventional corn. Like, conventional corn doesn't have more methionine than organic corn.

MS. SWAFFAR: Well, they've got potato gluten meals and some of those things that we don't have in the United States as an organic opportunity.

MS. BURCHAM: Right. But, again, I don't think that that is going to make up for everything. The European Union has much more robust standards, as far as how much outdoor access these birds are getting, and I think that makes up a lot of the difference. And they also are utilizing more methods, such as insect meal and things like that as well.

MS. SWAFFAR: Thank you for your comments.

MS. BURCHAM: Sure.

CHAIR BEHAR: Anyone else? I have a question. So, are these smaller scale operations grinding and mixing their own feeds? Because I don't know of any organic chicken feed that's available by the bag that does not contain

NEAL R. GROSS

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

methionine.

So, they may not be adding methionine, but I believe they probably, if they're buying any chicken feed, then they're probably getting methionine in it. So, they would have to be basically raising all of their or quite a bit of their own grains and grinding it and mixing it themselves.

MS. BURCHAM: We do have some farmers that speak to us that are raising the majority, if not all, of their cereals, and even soy, to feed to their poultry. But we do have folks using mixes from feed mills where they're not getting the methionine in the mix.

And I've been told that they request it without the methionine, because it's cheaper for them, or they had an option to -- because there's usually -- they're smaller feed mills, it sounds like, and they just have that option. And I would like --

CHAIR BEHAR: Anyone else?

MS. BURCHAM: -- to add that, we do know

NEAL R. GROSS

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

some more mid-sized poultry operations that do supplement methionine, but at less than the allowed level, and that they're very interested in the research for alternatives. Because, again, they feel that there are alternatives out there that have not been fully explored by the industry, and that needs to happen.

CHAIR BEHAR: Okay.

MS. BURCHAM: Thank you very much.

CHAIR BEHAR: Anyone else on the Board with questions? I guess not. So, next up, we have Ryan Mensonides, VP of WODPA.

MS. ARSENAULT: Yes, and Ryan, you should be unmuted now. Can you try to speak, so we can hear you? We're not hearing you, Ryan. Let's try -- I see you on my list.

MR. MENSONIDES: Can you hear me?

MS. ARSENAULT: Ah, we got you, there you are, thanks.

MR. MENSONIDES: All right. Sorry, I wasn't --

CHAIR BEHAR: Yes.

NEAL R. GROSS

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

MR. MENSONIDES: -- quite sure, I've never used this application. Okay. You can --

MS. ARSENAULT: Nor have I.

MR. MENSONIDES: -- hear me okay? I'm on speaker.

CHAIR BEHAR: Yes, we can hear you great.

MS. ARSENAULT: Yes.

MR. MENSONIDES: Okay. I'm just calling in on the topic of the origin of livestock, this will be my second time commenting since last year's NOSB meeting. I have just three quick key points.

The first one is, I would like this rule implemented as it is written up currently, with the appropriations bill that went through both the House and Senate, I don't want any changes.

We worked really hard with producers and processors and advocate groups and the consensus across the board is that this rule will make a significant impact on our industry. Three reasons why I think, or two anyways, that I think it's important.

NEAL R. GROSS

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

Number one, I'm a mid-size producer and, basically, there's a couple states and different regulatory groups that have allowed the abuse of this rule, as it stands currently. And it makes it a very unlevel playing field for myself and several of my other organic dairy farmers in my community.

Specifically in the fact that it costs us a significant amount more to raise our heifers organically and those that are transitioning them right now, as it stands, in my opinion, in blatant disrespect for the rule and the intent, have an advantage of somewhere between \$800 and \$1,000 per animal to get them to milking. That's a very expensive difference and we just can't compete.

The other thing is, it has also led to the influx of a tremendous amount of oversupply of milk in the organic market, which has impacted my profitability.

I've seen my equity drop about 35 to 39 percent in my cattle because of the oversupply of milk and making my cattle less valuable. And

NEAL R. GROSS

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

I've seen a 36 percent pay drop in the last two years because of the oversupply of milk, which is in huge part because of the transition of these animals.

I just would like to see the integrity held up in our industry. Our consumers are getting confused, there's a lot of bad news out there, and this is one way that we can regulate our industry and put more confidence back to our consumer by implementing this rule and governing ourselves in a better way.

And essentially, making it a level playing field, which will in effect reduce the oversupply of milk, which will allow our prices to go up, which will make me more profitable and the ability to stay in business and provide for the consumers that believe in what I am doing, as opposed to the people that have been breaking the rules.

I think that's all I have. If you guys have some questions, I'm glad to answer. Hopefully you heard that and I'm not muted.

NEAL R. GROSS

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

CHAIR BEHAR: No, we heard you loud and clear.

MR. MENSONIDES: Okay, I thought maybe I was talking to myself for like ten minutes.

CHAIR BEHAR: No. Are there any comments from the Board, or questions? Well, I want to say thank you for the hard work that it is to be an organic dairy farmer. I know that it's long hours and a lot of, you've got to have a lot of skills to be a good dairy farmer, so thank you for what you're doing.

MR. MENSONIDES: Can I make one more comment, I left out, if that's okay? And I appreciate that by the way, thank you.

CHAIR BEHAR: Very quick, yes.

MR. MENSONIDES: Very quick --

CHAIR BEHAR: Yes, very quick, please.

MR. MENSONIDES: We need this implemented immediately, we need no delay time on this. It's been delayed for five years already. So, I just want to reiterate that it needs to be put in place immediately. And that's what we tried

NEAL R. GROSS

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

to get through in appropriation bills as well. So, thank you for your guys' time and what you do and hearing me today, I appreciate it.

CHAIR BEHAR: You're very welcome. Okay.

MR. MENSONIDES: Have a good --
(Simultaneous speaking.)

CHAIR BEHAR: Yeah thanks. Do we have Kendra, Carmen, or Martin, Michelle?

MS. ARSENAULT: I am not seeing -- I went back to the top of the list, actually. So, Andrew, I have one phone number in the same area code, I'm going to unmute this 360 number and see if it's Andrew. Is that -- are you on the line, can you say something?

MR. DYKSTRA: This is Andrew.

MS. ARSENAULT: Andrew.

MR. DYKSTRA: No, I'm --

MS. ARSENAULT: Sorry, we skipped over you, because we couldn't hear you before, but we can hear you now.

MR. DYKSTRA: Yes. No, I did my -- I

NEAL R. GROSS

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

made my comments from my cell phone, so I'm in good shape.

MS. ARSENAULT: Oh, I'm so sorry.

(Simultaneous speaking.)

MR. DYKSTRA: You let me talk twice.

CHAIR BEHAR: I had a check next to his name.

MS. ARSENAULT: Oh, I'm so sorry. I had the wrong notation here. Okay, thank you.

CHAIR BEHAR: Mike Hocutt and Jay Willard, we didn't have them.

MS. ARSENAULT: No Jay. Not seeing Jay.

CHAIR BEHAR: Okay. Kendra, do you see Kendra Klein?

MS. ARSENAULT: Oh, Kendra's here.

CHAIR BEHAR: Okay.

MS. ARSENAULT: One second, we're unmuting Kendra's line.

MS. KLEIN: Hi.

MS. ARSENAULT: Kendra?

MS. KLEIN: Yes.

MS. ARSENAULT: There we go, we can hear

NEAL R. GROSS

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

you.

CHAIR BEHAR: We can hear you great, thank you.

MS. KLEIN: Great. I'm hearing some feedback, so apologies if you also are hearing that.

Thanks so much and thank you for fitting me here at the end of the stack. I want to start off by saying thank you to the NOSB's members and your commitment to the organic standards program.

I am a Senior Staff Scientist at Friends of the Earth. We are a national environmental organization, with over 1.9 million members and supporters. And I really briefly just wanted to make a comment on excluded methods and one related to soil health.

So, in terms of excluded methods, Friends of the Earth applauds the work of the NOSB to ensure that genetic engineering methods involved in in vitro nucleic acid techniques be considered excluded methods.

We recommend that induced mutagenesis that comes from gene editing and other in vitro

NEAL R. GROSS

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

techniques be considered in excluded methods. And we also support adding embryo transfer in livestock to the list of excluded methods, specifically when the embryo transfer is produced using in vitro nucleic acid techniques.

On the issue of soil health and climate change, I just want to note, as we all know, there's growing interest in soil carbon sequestration and a lot of momentum around that at the state and federal level.

And there's a growing body of research that shows us that the agricultural methods that are the heart of organic production, like cover cropping, composting, can increase soil carbon.

I also want to call out, Friends of the Earth recently published a research brief showing that many of the pesticides that are allowed in conventional and prohibited in organic undermine soil health, they disrupt soil communities, and, therefore, undermine the goals of soil carbon sequestration. So, just to say that, again, organic has a leg up in terms of soil health and

NEAL R. GROSS

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

regeneration of the soil and soil carbon.

So, Friends of the Earth recommends that the NOSB add an item to its work agenda that focuses on identifying and strengthening organic practices for climate mitigation, adaptation, and carbon sequestration. And that's it, very briefly. Happy to answer any questions.

CHAIR BEHAR: Thank you. Any questions from Board members? I guess not. Thank you so much, Kendra. Okay. So, we're going to go back and see, who are we looking for here? We did Jennie. Carmen and Martin? Carmen Fernholz?

MS. ARSENAULT: We're not --

CHAIR BEHAR: Hello, Carmen? Carmen is a man, by the way, I know him quite well.

MS. ARSENAULT: Yes. We're not seeing Carmen on the line, Harriet. I'm not finding him, his number or his name. Carmen, if you're on the line and you want to email or text me, to 202-997-0115, maybe you're calling in from a number you didn't send to me. You can also chat in the Zoom window if you're in front of your computer.

NEAL R. GROSS

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

CHAIR BEHAR: Hard to know what the weather might be, he could be out harvesting crops. Martin Lydgate Driggs from NOFA Massachusetts, can you find him?

MS. ARSENAULT: We did not find Martin either. Not seeing --

CHAIR BEHAR: Okay.

MS. ARSENAULT: -- his name or area code.

CHAIR BEHAR: Then, I think we are just about on time here, correct? Pretty close?

MS. ARSENAULT: Yes. Yes, pretty, pretty close here. A couple minutes early, maybe.

All right. There are a couple of other folks that we skipped over, Harriet, do you want to --

CHAIR BEHAR: Oh, there was Vanessa Hornai, right?

MS. ARSENAULT: Yes.

CHAIR BEHAR: Vanessa Hornai? Well, you said Cynthia Daley, she cancelled. Vanessa?

MS. ARSENAULT: No, I'm not seeing Vanessa either. I just want to double-check again. Vanessa.

NEAL R. GROSS

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

CHAIR BEHAR: George Ibrahim?

MS. ARSENAULT: No George.

CHAIR BEHAR: Then, you said look for Mike Hocutt and Jay Willard?

MS. ARSENAULT: Right. All right. It doesn't look like any of those folks are on the line with us.

CHAIR BEHAR: Yes, I think that was everyone. With all my checks and X's and dots. Okay. Well, I guess, with that, we could adjourn.

Except to say that we will be doing another webinar, similar to this one, but with different participants, except the Board members will be there. And that's on this coming Thursday, just two days from now, same date, same place. I mean, same time, same place.

MS. ARSENAULT: Great, thank you, Harriet. Thank you, everyone.

CHAIR BEHAR: Okay. Good-bye, have a good rest of your afternoon.

MS. ARSENAULT: Thank you, we'll talk to you guys on Thursday.

NEAL R. GROSS

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

(Whereupon, the above-entitled matter
went off the record at 3:35 p.m.)

UNITED STATES OF AMERICA
DEPARTMENT OF AGRICULTURE

+ + + + +

NATIONAL ORGANIC STANDARDS BOARD

+ + + + +

ORAL COMMENT WEBINAR

+ + + + +

THURSDAY
OCTOBER 17, 2019

+ + + + +

The National Organic Standards Board
met via web conference, at 1:00 p.m., Harriet Behar,
Chair, presiding.

PRESENT

- HARRIET BEHAR, Chair
- STEVE ELA, Vice Chair
- SCOTT RICE, Secretary
- SUE BAIRD
- ASA BRADMAN
- JESSE BUIE
- TOM CHAPMAN
- LISA de LIMA
- RICK GREENWOOD
- DAVE MORTENSEN
- EMILY OAKLEY
- DAN SEITZ
- ASHLEY SWAFFAR

NEAL R. GROSS

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

ALSO PRESENT

PAUL LEWIS, Director, Standards Division
MICHELLE ARSENAULT, Advisory Committee
Specialist
DEVON PATTILLO, Materials Specialist, Standards
Division
ANGIE PEGUES, Management Analyst

PUBLIC COMMENTERS

JO ANN BAUMGARTNER, Wild Farm Alliance
COLEHOUR BONDERA, Kanalani Ohana Farm
JANE DeMARCHI, ASTA
BOB DURST, Simple Organic Solutions
STEVEN ETKA, National Organic Coalition
LISA GERMO
CALEB GOOSSEN, Maine Organic Farmers & Gardeners
Association
AUSTIN HAROLD, Northwest Horticultural Council
EDWARD MALTBY, NODPA
ROBERT MORSE, Atlantic Laboratories Inc.
WILLIAM SELKIRK, Sterling Agriculture Inc.
ANGELA SCHRIVER, Schriver Organics & Schriver
Farms
DANIELLE QUIST, International Dairy Foods
Association
SAM WELSCH, OneCert Inc.

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

1:02 p.m.

MS. ARSENAULT: So we're going to officially open the meeting with Paul Lewis, the Director of Standards Division.

MR. LEWIS: Thank you, Michelle, and good afternoon. I'm Paul Lewis, Director of Standards Division in the National Organic Program, and I want to again welcome members of the Board and the public to today's National Organic Standards Board public comment webinar. And welcome again to our webinar this afternoon that we previously had on Tuesday.

And I appreciate everyone's participation and all your work serving on the Board. This webinar, like Tuesday, offers the opportunity for the public to provide comments to the Board as part of the upcoming face-to-face meeting scheduled for next week, October 23rd, 25th in Pittsburgh, Pennsylvania. Feel free to consult the NOP website for information about that meeting.

This meeting, today's meeting like all

NEAL R. GROSS

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

meetings of the National Organics Standards Board operate under the provisions of the Federal Advisory Committee Act. And I look forward to hearing comments from the public today, so it's just the Board preparing their recommendations yesterday in response to NOSB regular agenda items.

I also want to thank my colleagues, the NOP, and the Standards Division for all of the help behind the scenes, and all the success to help us for today's teleconference and webinar.

Before I turn to Harriet to lead us in today's webinar, I would also acknowledge the outstanding service of some of the parting NOSB members. Harriet Behar, Lisa de Lima, Tom Chapman, and Ashley Swaffar. This will be their last NOSB webinar serving as a member of the Board. Next week will be their last service on the Board at a public face-to-face meeting.

On a personal note, I want to thank Harriet, Lisa, Tom and Ashley for your service on the Board. I enjoyed working and also learning with you, and I appreciate your valued insights

NEAL R. GROSS

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

and recommendations for us in the production and the processing of organic products.

While I know next week we'll have an opportunity to work together, I want to use this forum today to kind of share with you personally, thank you, and wish you all the best in your ongoing journey and your future endeavors. Harriet, the floor is yours.

CHAIR BEHAR: Thank you, Paul, and ditto. I enjoyed working with you and all the many earnest discussions that we had. It's been a learning experience for me as well, and it's always good to kind of get down and really go through the details as we will be going through with the public commenters today.

I wanted to mention that we'll be recording the webinar today, and we also have a transcriptionist on the call who will be doing a transcription that will become part of the permanent public record for public comments on the Fall 2019 NOSB meeting.

And I believe that Michelle is working

NEAL R. GROSS

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

the mics on mute and unmute, and so she will unmute you when it's your turn to speak. I want to remind everyone that registration was required in order to comment today, and I will be announcing the next commenter, and then also the next person or two who are on deck so you can prepare yourselves to be ready to comment.

There will be a timer started when you begin to speak, and it will beep at three minutes.

So we would appreciate it if you would end your sentence then, and then stay on the line because there may be questions from the National Organic Standards Board members who would like to get further information on your topic.

Only National Organic Standards Board members are allowed to ask questions. Board members, please indicate if you have questions by raising your hands in the computer program, or if you're just on the phone, just let me know if you want to ask a question and you'll be able to speak.

Michelle, would you like to take roll call now?

MS. ARSENAULT: All right. Thank you

NEAL R. GROSS

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

for waiting while I unmute myself there. I think we're still working on unmuting a couple of the Board members who were having difficulties getting on, and we have a couple on the phone. So let's see, Sue Baird, are you with us?

Sue, I'm going to unmute your mic. You can talk now. Sue, we're not hearing you, but I see you on the line. Skipping over. Harriet, you're with us obviously?

CHAIR BEHAR: I am still here. Yes, I am.

MS. ARSENAULT: All right. Asa Bradman. Asa, did you make it? There you are, I see you.

MR. BRADMAN: Can you hear me?

MS. ARSENAULT: Yes, we can hear you.

And I just made you a panelist as well, just so you know. Jesse Buie, I know you're on the line because you were before me I think.

MR. BUIE: I'm here.

MS. ARSENAULT: Thank you, sir. Tom Chapman's going to be a little bit late; he's on

NEAL R. GROSS

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

a plane. Lisa de Lima, are you on the line with us?

Lisa de Lima, are you -- if you're talking, you may possibly be on mute. Let me see here. I see your number. Let me unmute you.

MS. de LIMA: Yes, I'm here.

MS. ARSENAULT: There we go. We're having a mute-unmute battle here in the office. All right, I got you. Steve Ela? Make sure you're unmuted. Steve --

VICE CHAIR ELA: Hi.

MS. ARSENAULT: There you go. We've got you. Thanks, Steve.

VICE CHAIR ELA: Okay, yes.

MS. ARSENAULT: Rick Greenwood. Rick, were you able to get the link working for you? I don't see -- there we go. Make sure it's the right Rick. Rick, I just unmuted you.

MR. GREENWOOD: Yes, I'm here.

MS. ARSENAULT: Excellent, all right. And Dave Mortensen is going to be joining us late. He had a conflict early on. Emily Oakley, I know

NEAL R. GROSS

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

you're here. I saw your name down there.

MS. OAKLEY: Yes, I'm present.

MS. ARSENAULT: Excellent. Thank you, Emily. Scott Rice, we heard Scott earlier.

MR. RICE: Yes, present.

MS. ARSENAULT: Excellent, thank you.

A'dae Romero Briones will not be with us today. A'dae had a family medical emergency and is not going to be on the call. Dan Seitz? I think Dan is also going to arrive a little bit late to the call. Thank you all for waiting while I search my memory for that email.

And Ashley Swaffar, are you out there?

Let me make sure your mic is unmuted, Ashley. You are not unmuted. There you go. You should be unmuted.

MS. SWAFFAR: I'm here.

MS. ARSENAULT: Okay, great. All right. So Harriet, currently we have -- we should have 11 staff -- 11 Board members -- 10 Board members on the call with us at the moment which is quorum.

And I'm expecting a few to join us a little bit

NEAL R. GROSS

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

later. And Harriet, if you're talking, you are on mute.

CHAIR BEHAR: Yes, I have the same number, 10 NOSB members, which are -- three of them joining us a little late.

MS. ARSENAULT: I'm getting a little feedback here. So we're going to watch people's mics and mute and unmute as necessary. We would also appreciate it if you guys can keep yourselves on mute until your name is called to speak, and that way we will minimize background noise and make everything go more smoothly. All right, Harriet, it's all yours.

CHAIR BEHAR: Sounds good. I just wanted to also say how important public comment is to the members of the National Organic Program as we work through our decision-making process for both rule making and guidance, which materials are on or off the national list.

And I want to thank all the commenters for all the time and effort you have put into your comments. Just be assured that they are very

NEAL R. GROSS

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

important to us. So I would like to start first with Ed Maltby of NODPA, and Steve Etko of the National Organic Coalition is on deck with Dick Atlee after that. Ed, are you there? We are not seeing Ed on the line. Let me just double check a couple --

MR. MALTBY: Hello?

CHAIR BEHAR: Hello. Excellent.

MR. MALTBY: I'm here, I'm there, somewhere.

CHAIR BEHAR: Yes, we can hear you.

MR. MALTBY: Okay. I'd like to start by thanking all members of the NOSB for their service, their dedication, and above all, their patience. I can only imagine the long hours of deliberations. And for those leaving to go to greener and more relaxed pastures, then a special thank you to those people.

Just to prove that some recommendations of the NOSB do actually get put into force, we are urging the USDA to finalize the Origin of Livestock proposed rule, the 2015 rule, as soon as possible

NEAL R. GROSS

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

after the 60-day comment period with immediate implementation of the regulation that would require that all operations raise their animals organically from the last third of gestation outside of the one provision that allows for a one-time transition of a whole herd into organic production.

And that would also include the fact that you can't take organic calves and take them out of organic operations and then pull them back in when they're reared. So it has to be continuous organic production.

The dairy pasture rule enforcement is gaining some traction, and I want to congratulate the NOP on their significant progress. It seems that you're having to teach certifiers all over again exactly what the regulation says.

The regulation that we helped put in force in 2010 was a very open and transparent and long process, and there should be no excuse or reason why those within the certification process have any doubts about exactly what needs to be done, and how it's supposed to be done, and how it's

NEAL R. GROSS

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

supposed to be recorded.

Once dairy enforcement falls short, then large operations will continue to deny their animals meaningful access to pasture, and are not complying with the many different parts of the regulations that make the holistic integrity of the organic rule.

Gene editing, it's somewhat absurd that we should think about putting gene editing into any organic regulation. It is a form of genetic engineering that the NOSB has repeatedly determined is clearly excluded in organic by the very definition of the words.

Any future to effort to allow products of genetic engineering into certified organic products will be met with the full force of the organic community defending the very basic nature of organic.

The newer genetic engineering techniques are still not needed in organic, and are not wanted by producers; definitely not by consumers and retailers.

NEAL R. GROSS

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

The NOSB has already reviewed with numerous opportunities for public commenting, gene editing methods and techniques, and recommended that they remain excluded methods.

And moving on to vaccines in organic livestock production, once again for organic producers, they are an essential tool in their toolbox, and we need every opportunity to be able to use that. A lot of well-established organic operations do not, in fact, need vaccines as they developed their own immunity in their own situations and on their own farms.

We support the change proposed by the subcommittee --

MS. ARSENAULT: This is Michelle. I'm sorry, that was the timer. I'm not sure that you heard it very well, but your time is up.

MR. MALTBY: Okay. Sorry, I didn't hear anything.

MS. ARSENAULT: That's okay. I realize we didn't test the timer to make sure everybody could hear it. So we'll make sure it's

NEAL R. GROSS

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

louder next time. Harriet, are you -- I think you're unmuted.

CHAIR BEHAR: I'm here. I don't see any hands, but Ed, I do have a question for you.

Can you speak in a short way to the economic impact of certified organic dairy operations if the origin of livestock rule is not implemented in a speedy manner?

MR. MALTBY: Yes. As most people understand, the organic dairy has gone through a massive cut in pay price and an overwhelming surplus that has forced many organic dairies out of business.

And one of the major causes for that is that there is no consistent enforcement of the origin of livestock. We've had large-scale transitions of conventional heifers and cows, and even complete herds on a continuous basis, which has upset the great basic nature of supply and forced the (inaudible due to telephonic interference) hope that that rule will be implemented quickly.

NEAL R. GROSS

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

There will be many, many more organic dairies that will not be able to survive. And also we do not in any way want to cause a lack of integrity with consumers if they find out that organic milk -- a large amount of organic milk is coming from animals which have been conventional only in the last year.

CHAIR BEHAR: Okay. Thank you. Anyone else on the Board have a question?

MS. ARSENAULT: Harriet, Ashley has a question, and we are having trouble unmuting her mic.

MS. SWAFFAR: Can you hear me?

MS. ARSENAULT: Yes, we can hear you now. Thanks, Ashley.

MS. SWAFFAR: Yes, I just want to hear the finishing part of your statement about vaccines, what your stance is on that. Could you finish your statement?

MR. MALTBY: Yes. The DNOP should develop a list of which veterinary vaccines have not been produced using excluded methods. And then

NEAL R. GROSS

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

this list can be published and made available to all certifiers, and so we'll have consistent implementation of the regulation yet again, and which will enable producers to know exactly where they stand with their certifiers, and it will stop the common practice of certifier shopping.

CHAIR BEHAR: Thank you, Ashley. Any followup? You okay?

MS. SWAFFAR: I'm good. I just wanted to hear the rest of the statement. Thanks.

CHAIR BEHAR: Okay.

MS. ARSENAULT: Harriet, if I could interrupt one second. This is Michelle. We're going to test the timer to make sure everybody can hear it. Apologies for not doing it sooner.

(Timer beeping.)

CHAIR BEHAR: I could hear it. I hope everyone else can.

MS. ARSENAULT: Is it faint or can you hear it pretty well?

CHAIR BEHAR: Kind of faint. It's not as loud as it was on Tuesday.

NEAL R. GROSS

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

MS. ARSENAULT: All right. Good to know. We'll work on that. Thank you.

CHAIR BEHAR: Okay. Next up is Steve Etko with the National Organic Coalition, and after him is Dick Atlee, general public. Steve, you can start.

MR. ETKA: Okay. Good afternoon. I am Steve Etko with the National Organic Coalition.

NOC urges NOSB to continue to track NOP progress in addressing organic fraud, both domestically and internationally.

Relevant to those efforts, the 2018 Farm Bill includes new authorities for the NOP to address organic import fraud through a rule-making expected later this year, but also through the establishment of an interagency working group to ensure that USDA and Customs and Border Protection, the lead inspection agency at U.S. Ports of Entry, are coordinating efforts to crack down on fraudulent organic imports.

There are a whole host of casts that we are encouraging USDA and CBP to address through

NEAL R. GROSS

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

this working group, including but not limited to the need for more specific -- more organic-specific harmonized task codes.

The International Trade Commission to better track the value and quantity of organic imports; plans to update CBP's automated import/export tracking system to build organic-specific prompts and questions called message sets into the system; examining NOP's authority or lack thereof over uncertified entities engaging in fraud, as well as operations that have surrendered their certificates in order to circumvent enforcement; collaboration on strategies with regard to organic product that has been fumigated at the port of entry because of test problems to make sure the product is not labeled and sold as organic; and lastly, updating the Memorandum of Understanding between AMS, APHIS and CBP to address procedures for handling organic imports.

In addition to the organic farm bill provisions, there are some important organic wins

NEAL R. GROSS

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

to the appropriations process as well. In recent years, NOC and our other D.C. partners have been successful on getting Congress to increase funding for the NOP, and additional increases are slated for 2020 as well.

Also both the House and Senate FY2020 agriculture appropriations bills require USDA to finalize the origin of livestock rule for dairy animals within 180 days of enactment to close the loophole that has been allowing some organic dairies to bring conventional cows into their operation on a continuous basis after managing them as organic for just one year.

NOC strongly supports this appropriation provision and lobbied for it. The 180-day deadline is a moving target, however, because Congress has not yet finalized the 2020 appropriations bill.

In the meantime, it sends a very clear message that Congress intends USDA to finalize the origin of livestock rule ASAP, and USDA has announced their intention to do so.

NEAL R. GROSS

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

We look forward to working with USDA and the NOSB in support of promulgation of a final origin of livestock rule as expeditiously as possible.

And we also in closing want to thank the NOSB for all your service, and particularly those folks who are retiring off the Board after this meeting. Thank you.

CHAIR BEHAR: Thank you, Steve. Any questions from NOSB Board members?

I wanted to ask you a couple questions, Steve. I know you do some work on Capitol Hill.

It seems that across the aisle we have kind of universal support for organic agriculture that we have organic farmers and processors in every state.

Do you think that Congress is paying attention to this rule-making and would like to see it move forward?

MR. ETKA: Harriet, are you asking about origin of livestock rule-making or organic import fraud rule-making?

CHAIR BEHAR: I would say both.

NEAL R. GROSS

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

Michelle, I think that you are --

MS. ARSENAULT: Yep, yep, yep. Sorry, Harriet. I just accidentally muted Steve's line. Sorry, Steve.

MR. ETKA: So I would answer you, Harriet, in both cases with regard to the origin of livestock rule and the organic import fraud rule, that we're expecting out of NOP shortly, there has been broad bipartisan support on both of those things, evidenced both by provisions in the farm bill that have bipartisan support on the import fraud issue, and then provisions in the appropriations process -- both in the House and the Senate -- that require USDA to finalize the origin of livestock rules. In both cases, both Republicans and Democrats were supportive of those efforts.

CHAIR BEHAR: Okay. Thank you. Okay, next up is Dick Atlee. Michelle, do you have him? And then after that, Linda Coleman on deck, with Lisa Germa after her.

MS. ARSENAULT: Harriet, where -- I'm

NEAL R. GROSS

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

not seeing Dick Atlee. Dick, if you're on the line with us, you should be able to unmute yourself to speak. We only have one 207 area code, and several speakers have that area code, so I'm not sure that one belongs to Dick.

CHAIR BEHAR: Okay, is Linda Coleman there?

MS. ARSENAULT: Linda, are you on the line with us? You can unmute your own line if you are. No Linda either? We're going to come back around.

(Simultaneous speaking.)

MS. ARSENAULT: Lisa Germa? Lisa's on the line with us. We're unmuting your line, Lisa.

MS. GERMO: I am here. Can you hear me?

MS. ARSENAULT: We can hear you, excellent.

MS. GERMO: Perfect. I'm going to set my own alarm here for three minutes because I don't think I'm going to hear that little beep.

Hello. My name is Lisa Germa. First

NEAL R. GROSS

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

of all, I want to thank the NOSB for having me speak on here and listening to me. I'm a mother and a consumer of the organic seal. I am opposing the genetic engineering under the organic seal.

We already have excluded methods that are here for regulation, and I think that should include all old and new technology. For me, as a consumer, I pick and choose my food wisely.

To throw genetic engineering under the organic seal would actually hurt the organic seal because when the regular consumers find out this is under there, I think consumers will choose not to buy any product that has the organic seal label on this.

And just like the first speaker, I think that if genetic engineering does fall under the organic seal, it will be met with force. I also think that the trust of the people, the consumer, will be lost for the organic seal. And who knows that the organic seal might be lost all together in itself.

Adding any GM food to the organic seal

NEAL R. GROSS

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

undermines the American people who choose to eat clean organic food, and it weakens the integrity of the organic seal.

So I'm urging that we not do this. We've been here before. It doesn't make sense. We have rules and regulations already, and I would love to be a supporter of the organic seal as I choose my food wisely. And thank you very much for letting me speak.

CHAIR BEHAR: You're welcome. Thank you for taking the time to come and speak to us.

Any questions from Board members? I don't see any. Thank you very much. Next, has Dick Atlee or Linda Coleman arrived?

I'm going to take that as a no, and move forward to Robert Morse is next with Atlantic Laboratories, and William Selkirk on deck after that. And after him, JoAnn Baumgartner who I understand is out in Utah somewhere. So next is Robert Morse, and then William Selkirk.

MS. ARSENAULT: Robert, if you're there, you should be unmuted, we hope, 207.

NEAL R. GROSS

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

MR. MORSE: Hello. Okay, this is Robert Morse. Can you hear me?

MS. ARSENAULT: I can hear you, and Robert, I have your video cued up so hopefully I can get it to play and to share it with everyone who's on the webinar with us.

MR. MORSE: Okay. Can I just introduce myself first?

MS. ARSENAULT: Absolutely. I'm going to hand it back to Harriet. So I just wanted her to know that you do have a video, so thank you.

CHAIR BEHAR: Okay. Go right ahead.

MR. MORSE: Okay. I'm Robert Morse. I'm President and Founder of the 48-year-old seaweed processing company, Atlantic Laboratories, Inc. and North American Kelp located in Waldoboro, Maine.

And you're about to see, those who are able to see the video, you'll see a bay that I've been harvesting for 48 years, and I would like to entertain questions. This is in regards to the fact that the Board is entertaining some kind of

NEAL R. GROSS

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

regulations on harvesting of seaweed, so please play the video.

MS. ARSENAULT: Can you guys see the video screen? I want to make sure I'm sharing the right screen with you before I start the video.

MR. MORSE: Yes.

CHAIR BEHAR: Yes.

MS. ARSENAULT: Okay, excellent.

(Video played.)

CHAIR BEHAR: Okay. Michelle, was that a full three minutes?

MR. MORSE: It should be two minutes, 59 seconds.

CHAIR BEHAR: Was that at three minutes?

MS. ARSENAULT: Yes. The video was two minutes and 59 seconds long.

CHAIR BEHAR: Okay. I do see Emily has her hand raised.

MS. OAKLEY: Thank you. Yes, thank you for your video and for your testimony. And I had a question which is that I know North American

NEAL R. GROSS

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

Kelp has certified organic kelp we know for livestock use. And I wanted to ask if you are aware that what we're discussing is the possibility of requiring certified organic status for seaweed that's harvested for crop fertility input, so for fertilizer use.

And I'm wondering since you do have kelp, you know, that's certified organic right now for livestock use, what would be or would there be any challenges to requiring organic certification for the seaweed that you harvest for crop fertility input use or fertilizer use?

MR. MORSE: Well, I'm totally against it. We're not -- the rules that were set up for harvesting seaweed based on the land, not on the ocean. The rules were done for Iceland where there's nobody living there. It's the size of a continent island.

And Coastal Maine, there's so many restrictions on harvesting on the organics that half of our harvest is organic and the other half isn't. So if you were to take and put all our

NEAL R. GROSS

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

fertilizer under that requirement, you know, I'm not sure what we'd do with the company. Whether we take it away from organic, the animal and put it to that, or how we would handle it.

But, you know, the sea is one big body of water, and it moves around. And the rule is you put a line in the water, and you say that this is organic on this side, and it isn't on the other one. It's living in the same water.

It's kind of -- I think if you do anything, you might want to address the aquatic aspect of growing plants and do analysis on them instead of trying to divide an ocean that's constantly circulating.

Our harvest is a cultivation. We only take the tops of the plant, and it grows back from the tip. So we're one of the few fisheries that don't take the whole organism.

And that's what you saw in some of the pictures. That bay is the first bay I harvested back in '71, and we continually harvest it today.

Before that, it was harvested back in the 1850s

NEAL R. GROSS

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

in a commercial fertilizer operation. They dried seaweed in a rotary drum, wood-fire dry it, and then they sent it to Connecticut for the tobacco growers.

And we currently dehydrate in a wood-fired rotary drum, so it's like Back to the Future. It's a loaded question, Emily, but thank you for asking. You were on one of our boats about two years ago if I recall, right?

MS. OAKLEY: Yes, that is correct. Could I just ask a quick follow-up then?

MR. MORSE: You can do whatever you want.

CHAIR BEHAR: Yes, you can.

MS. OAKLEY: Thank you. So if half of your harvest is certified organic for livestock, can you help me understand what the barrier would be to certifying the rest of the harvest as organic?

MR. MORSE: In how many seconds?

MS. OAKLEY: I don't know.

MR. MORSE: The rules are such that now they're telling us we can't even tow our nets into

NEAL R. GROSS

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

the ocean after we harvest from a spot. That we can't even tow the nets in the same water that surrounds the seaweed, so it's just getting too costly.

You know, I've got a \$500,000 vessel now that we're constructing to be able to carry the nets according to the organic regulations. There's only so much that we can economically afford to do and still put a product out that, you know, the market isn't that hot with all the dairies going down.

So we also offer a conventional animal feed supplement which is selling quite well as well.

And our growth is in the biological pesticide market. We have new fungicide and pesticide seaweed-based products hitting the market here this fall.

So I don't know. We'd like to stay in the program. But if the barriers keep crawling up and the costs keep crawling up, I'm not sure the market can afford it. And there is -- well, I won't get into that part of it on the phone call.

NEAL R. GROSS

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

But we have a lot of imports coming in, let's put it that way, that aren't looked at.

MS. OAKLEY: Uh-huh. So is the problem that you're -- am I understanding that the cost to certify organic, the seaweed that you harvest for livestock feed is high enough, that if you are required to do the same for the fertility input, that wouldn't be economically viable? That the cost of certification or the practices --

MR. MORSE: Well, I'm just not sure that we would, you know, we might just go with the biopesticide and go in the biological market which is growing fast, and abandon the organic market.

I'm not sure, we'll have to see. We keep working with the certifiers, and we seem to have a pretty good understanding, and then something else happens and they want something else done. It's just not definitive.

I mean, you've got a two-sentence paragraph that's regulating seaweed harvesting. We have 15 species on the coast of Maine that are commercially harvested, and we've got two sentences

NEAL R. GROSS

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

out of the program that regulates it all.

And then there's all these decisions that are being made. We don't see them in writing, but they grab something else from outside the program. I read the program and I don't see where certification of a fertilizer. Do you certify manure inputs?

MS. OAKLEY: No, no. It's not something that is required. Right now there is no requirement that crop fertility input be certified organic. And this is only one aspect that we were exploring at the best of all means, of addressing any potential environmental concern. But no, it's certainly not --

MR. MORSE: I can understand that, Ms. Oakley. The complaint that you have down there is from a Mrs. Sealey, who is a non-credentialed seaweed scientist who's an activist.

I mean, she burned herself out up here in Maine, and now she's I guess been down your way for four years. And they always want us to prove a negative that what we're doing doesn't affect

NEAL R. GROSS

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

anything, rather than show us the problem.

I mean I don't even know what we're supposed to be defending ourselves against in this complaint. I'm a member of OTA, and I got on the board for them and talked. And they said, what are we supposed to defend ourselves on?

The seaweed in this program coming in from 15 different countries, four provinces, East and West Coasts of the United States, multiple states. We're regulated here by our State Department of Marine Resources. We're one of the least, you know, fisheries that have no violations.

It seems like the state asked us to, and how are you as a program going to take over management of all these seaweed resources and different harvesting species, where, you know, we have experts in the state. We have a psychology department at the University of Maine --

MS. OAKLEY: Sir, can I disrupt you just really quickly because I just want to clarify one thing, and then I'll turn it back over to Harriet, which is just to help you understand that

NEAL R. GROSS

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

the Board isn't looking at this because of any single individual's interest or testimony before the Board.

It's something that came up during the 2015 sunset review, and that was over a host of seaweed products and materials and handling craft and livestock, and the Board got a technical review on the subject at that time. But we've received a tremendous amount of testimony along the spectrum of this issue. Certainly from those who feel that things are adequate regulated as they are, versus some who wish to see more regulation of the industry.

So just to make it clear that there isn't any single individual that is propelling this discussion. It's a much broader issue that the Board is looking at. And Harriet, I'm done. Thank you.

CHAIR BEHAR: Okay. And Steve Ela has a question.

VICE CHAIR ELA: Yes, I'll just -- I don't want to take up a lot of time, but I am curious.

NEAL R. GROSS

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

You know, we've received a lot of testimony over this last several years about, you know, the sustainability of the Maine system, and I don't have any doubts about that.

I guess one, and I think you alluded to it, that there are a number of products that come not from Maine or not from regulated fisheries.

And so I guess -- but yes, the organic industry does use those products.

So do you have any thoughts just very quickly of how the NOSB might help protect the environment in those non-regulated areas?

MR. MORSE: I didn't say they were non-regulated. I just said there was -- I don't know. I'm trying to defend the seaweed harvest, so I really don't want to start going and exposing certain things that I've actually done.

I've spent over \$13,000 complaining or putting in complaints to the NOP on imports, and then there's nothing ever done. So I mean you can go -- I guess you can look at our, if there's a complaint department. It's not you folks. I'm

NEAL R. GROSS

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

not a bureaucrat, so I don't know all these different things.

It's not NOSB, but the NOP I've put complaints in since 2013, with nothing being done.

I've spent thousands of dollars doing it, so I'm done.

CHAIR BEHAR: Okay. I guess we can do a little research on that. So this is Harriet again, and I sit in the environmentalist seat on the Board. And so I think maybe I'll be able to get some answers to my environmental impact questions from the panel that we'll be having in-person in Pittsburgh.

But I have somewhat of a concern of the -- I understand there's no by-catch, but the habitat for a lot of the smaller kind of feed animals and even the kelp itself. And I just wonder about the health of the fishery when there's significant kelp harvest going on in an area.

I'm not asking you necessarily your opinion of that, but just wondering if there are -- if there have been studies of this that I could

NEAL R. GROSS

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

then look to to get some answers.

MR. MORSE: I believe you're going to have some scientists down there on your panel. I've seen some lists of things. I'm not sure who they're going to be. But if you look at the coast of Maine, we have over 150,000 acres of intertidal zone of which 70,000 acres is rockweed habitat.

There's anywhere between 1.2 and 3 million standing tons of rockweed on the coast of Maine. There's approximately 10,000 to 14,000 tons harvested a year. There's a turnover rate every year as the plant matures. At 10 years, if it lives 10 years, 10 percent comes off the rock. You have storms.

I'm on a landline plugged into the wall at the moment. We just had a northeaster come through last night. And we lose between 20 and 30 percent of the standing resource to storms, and then we have ice in the winter. So the amount we harvest compared to what naturally comes off. And when we harvest it, we're leaving -- we have the highest cutting height in the world at 16 inches.

NEAL R. GROSS

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

You go and look at the rocks in those videos, some of those areas were just harvested less than 12 months ago. It's not a complete harvest. It's a spot harvest, and so there's plenty of weed left behind for anything that needs cover and that type of thing.

I mean there was a -- we were accused once of destroying periwinkles when we harvested.

There's a study by Tufts University and the Bigelow Lab, and they found that a year after we harvested, they had 314 percent more periwinkles in that area we harvested than were there before.

That's because you open up the sunlight, and then the green algae grows underneath, and that's what they eat. So, this is a huge, you know, it's a huge question.

But I mean we've got them working on this bay that I just showed you. There's eight sites on this bay right now. University of Maine is doing birds and what you just alluded to, Harriet, the micro -- I don't even know what they are -- little organisms that grow in the bottoms

NEAL R. GROSS

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

of the seaweed and stuff. So that study should come out in the next year or so.

CHAIR BEHAR: Okay, great.

MR. MORSE: I'm only one of eight sites. They have eight sites up and down the coast, and that video you saw, it's got eight sites in it.

CHAIR BEHAR: Okay, great. Well, we need to move on. I thank you for your comments and for the nice video.

MR. MORSE: Yes. Thank you very much.

CHAIR BEHAR: Next up is William -- you're welcome. Next up is William Selkirk, with Jo Ann Baumgartner on deck. William, are you there?

MR. SELKIRK: Yes, I am. I hope you can hear me well.

CHAIR BEHAR: Yes. We can hear you. Go ahead.

MR. SELKIRK: Very good. Thank you. Well, first I want to thank the NOSB Board members and support team for allowing me to speak and share

NEAL R. GROSS

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

some ideas.

I am VP of Research with Sterling Ag, and about a year ago, give or take, we learned of the synthetic fatty alcohols for organic tobacco suckers, and we began researching other alternative organic methods to be able to have the same efficacy.

And during case studies, we found that we could do so, and we could do so while it may cost a wee bit more, the cost break for overall is a little bit less. So we've had good efficacy results.

And I'm asking the committee to consider not allowing synthetic fatty acids to be used in the suckering treatment of organic tobacco production.

We have -- every one of our ingredients in our formula is on the allowable list. I am happy to add that we have received preliminary approval of the formula itself from VOF as they are made with organic products.

And it actually might be possibly --

NEAL R. GROSS

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

I haven't had time to research this -- possibly the first time a test site for organic cultural use in itself was a certified organic product.

We also want to point out in the paper that we submitted, that the plant suckers to the EPA are considered a pest, hence the term pesticide rather than herbicide.

All of our entire ingredient list consists of rosemary essential oil, citric acid from oranges, malic acid from apples, and certified organic potassium liquid soap using medium-chain triglycerides, which are effective in tobacco sucker control.

I'll follow up on the last statement and then open it up. In order to allow this new product to be substituted for synthetic fatty acids, I asked the Board to consider voting to allow the use of soap in organic agriculture to include sucker control.

And this small change would allow current synthetic fatty alcohols to sunset, and the certified organic one to be used in the future

NEAL R. GROSS

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

instead. And so we've been very successful with our efficacy, and every ingredient is on the organic approved list.

Now, I will open it up and see if there are any questions. That's basically the Reader's Digest of our research.

CHAIR BEHAR: Okay, Steve has a question.

MR. SELKIRK: Hi, Steve.

VICE CHAIR ELA: Hi. Thanks for your comments, and I remember -- I can't remember if it was you personally that testified at the Seattle meeting -- but could you list those ingredients again? And also, we had a speaker from Extension Service that had done a number of -- on our previous webinar on Tuesday -- a number of efficacy trials.

And at least from his trials, rosemary oil was not a real effective material in terms of his lecturing. And so I'd like to follow-up on how your product might be different from some of those materials that you have tested for efficacy.

MR. SELKIRK: Very good question. And

NEAL R. GROSS

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

he is absolutely correct. Our C8 and C10 is derived from multichain triglycerides that is used to produce the soap, and we were using 40 C.F.R. 152.25 table one and two, which is the list of active and inert ingredients that are allowed for pesticide use that are exempt from EPA registration.

So we derived our soap which is on the inert side. Our soap actually is where the triglycerides, the multi-chain triglycerides C8/C10 are. The rosemary essential oil, while it is considered an inactive ingredient from the U.S. EPA, it is nonetheless in there as a preservative for bacterial control.

So he would be correct. That, in and of itself, would not have much efficacy as the rosemary essential oil to the reduction of tobacco suckers.

VICE CHAIR ELA: May I ask a follow-up?

I guess I would -- I'm -- and forgive my fuzziness on the chemistry, I guess. So the fatty alcohols that are up for approval by us now, if I remember right, are the C8/C10 chain links. And so my

NEAL R. GROSS

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

understanding that your process is a non-synthetic process to get to those triglycerides?

MR. SELKIRK: That is correct, yes. Yes, sir. We use the saponification method, and it's so unique that we have a provisional patent that went into a formal patent because of the way we've done this.

But we've had -- we're using no synthetic approaches to this, and even the malic acid is derived from apples -- certified organic apples.

And of course the chemistry is interesting. You know, in the conventional tobacco world, we have maleic acid which is a double-chain carboxylic acid. Citric acid is a di-carboxylic acid or single-chain, and malic acid derived from apples is a single-chain.

By putting the two together, we actually -- certified organic you know from permutation processes, we're actually able to provide that double-chain efficacy of malic acid without using -- maleic acid by using those two

NEAL R. GROSS

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

together that are organically approved.

MR. BUIE: Harriet?

CHAIR BEHAR: Okay, yes. Rick, is that you?

MR. BUIE: No, this is Jesse.

CHAIR BEHAR: Okay. Go ahead, Jesse.

MR. BUIE: So I just wanted to ask again, have comparative studies with this compound and fatty alcohol been published yet? It seemed like you mentioned some kind of studies.

MR. SELKIRK: They've not been published yet. We're just now finishing up our seasonal work on them, so they have not been published yet. But we will probably publishing to academia. Academia will be our first place to post our research.

MR. BUIE: Oh, okay.

CHAIR BEHAR: Any other questions? Go ahead, Steve.

VICE CHAIR ELA: You said you'd received initial approval for this, and I can't think of who you said, but when given the P&O,

NEAL R. GROSS

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

getting things on the market always takes more time than we think. When would you anticipate that this would be available? What growing season would your product be available for?

MR. SELKIRK: If approved, we could actually get it out here into the 2020 market starting March 1st.

CHAIR BEHAR: Okay. Emily has a question.

MS. OAKLEY: I didn't understand your -- it felt like the line was cutting off. Did you say who you're waiting for approval from?

MR. SELKIRK: Oh, from your Board, Emily. Because this is a pesticide, and even though EPA says, you know, it's waived for their registration purposes based on the ingredients we use and how we use them. We would be asking the Board to consider, you know, adding -- because it's a saponification method, or soap, add this to the approved list.

CHAIR BEHAR: Okay. So we would probably need to have a petition for reviewing a

NEAL R. GROSS

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

new soap or for a different use? But we can talk to you about that outside the webinar. Yes, I guess.

My question to you would also be, you know, the field trials. We really have heard a lot from the organic tobacco growers that they absolutely need something for sucker control. And many things have been tried, but the fatty alcohols is the only thing that worked.

So we have to take that into account as well. But if you've got something coming down, you know, the pike, we would be very interested.

And I'm wondering if you would be willing to share the ingredients in your product, or are they proprietary?

MR. SELKIRK: No, no. We have at this moment patent protection, so we would have no problem with sharing the full ingredient list if that helps you make a determination or decision.

CHAIR BEHAR: So maybe you can send that off to Michelle, and she can share that with us. Okay. I'm going to move on -- thank you --

NEAL R. GROSS

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

to the next speaker, Jo Ann Baumgartner. Thank you very much.

Jo Ann Baumgartner is next, with Steven Sprinkle and Angela Schriver on deck. Go ahead, Jo Ann.

MS. BAUMGARTNER: Hi. This is Jo Ann. Can you hear me?

CHAIR BEHAR: Yes.

MS. BAUMGARTNER: Okay, yes, Jo Ann Baumgartner with the Wild Farm Alliance. And over the years it's been great that the NOSB has weighed in on biodiversity conservation issues.

I wanted to start by sharing with you that last week we held two successful biodiversity conservation trainings for organic inspectors with IOIA and CCOF. And during the training, a red-shouldered hawk swooped down to catch and eat a mouse right in front of us, showing how important biodiversity is to the organic farm.

But what I really wanted to talk about today is protective native ecosystems. We want to underscore how critical it is for the NOP to

NEAL R. GROSS

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

adopt the NOSB's recommendations for that.

This will change and make it hard to burn the Amazon forest one day and become certified the next. To remind the NOP, this was unanimous NOSB recommendation and approximately 1,000 public comments were in support.

Also, when the NOP publishes the rule change, they need to publish native ecosystems guidance that explains how farmers and certifiers will determine whether a piece of land contains a native ecosystem or not.

Currently, we are working with partners on identifying the best tools and techniques to include in the guidance, and we will keep you updated as our work progresses.

Secondly, we are not in support of gene editing. And lastly, we urge the NOSB to recommend a rule change that requires all marine vegetation used in organic production be certified to a wild crop harvesting practice standard.

Rockweed and other algae are part of a functioning ecosystem that supports many

NEAL R. GROSS

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

organisms including birds. Coastal shore birds have lost one-third of their population since 1970.

There are many reasons for that, including habitat loss, declining fisheries, and climate change.

While the NOP is not currently responsible for certifying crop inputs, in this particular situation, this change needs to remain.

The good news is that there are certifiers and inspectors already using 205, 207 to certify marine algae for human food, livestock feed, and crops' input ingredients.

These examples can be used to move forward this rule change, but NOP should also work on publishing marine material guidance. Thank you.

CHAIR BEHAR: Thank you. I see Emily has a question.

MS. OAKLEY: Thank you, Harriet, and thank you, Jo Ann. The first is a question for the program as they are able to answer Jo Ann's question regarding rulemaking for the needed ecosystem documents and proposal that we passed

NEAL R. GROSS

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

last year, if there is any update on if and when that might happen, and then I have a question for Jo Ann after the program answers that.

CHAIR BEHAR: Will Paul or maybe Devon be able to speak to that?

MS. ARSENAULT: Harriet, we are looking to unmute that line, give me one moment. And Harriet, while I have you, Ashley also has a question.

(Simultaneous speaking.)

CHAIR BEHAR: When Paul's done, Ashley, you can speak next.

MR. LEWIS: Great. So thanks for posing that question, Emily. As you know, we have a number of rulemaking initiatives that we're focusing on right now especially in terms of strengthening organic enforcement, so we're aware of these recommendations.

Obviously, we're studying them and we don't have any further response at this time.

CHAIR BEHAR: Go ahead, Ashley.

MS. ARSENAULT: Ashley, are you able

NEAL R. GROSS

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

to unmute your own line? Let's see if we can unmute you. All right, Ashley's muted. Let me -- we're looking, we're looking. There we go. All the way down at the bottom.

MS. SWAFFAR: My question is for the last commenter, not this one. Sorry.

MS. ARSENAULT: Sorry about that, Ashley.

MS. OAKLEY: Harriet, could I ask the other question which was for Jo Ann?

CHAIR BEHAR: Yes, go ahead. Go ahead Emily.

MS. OAKLEY: Thank you, Jo Ann, for your comments and I was wondering, there's been, as you've heard today, some concerns about creating regulations or requiring organic certification for seed we've used in organic production, and I'm wondering if you think that guidance could be developed for this topic and similarly, that you're recommending that guidance be created for the needed ecosystem proposal.

MS. BAUMGARTNER: Well, yeah, if I

NEAL R. GROSS

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

think fits the -- it may work. It would certainly help if we went in that direction. I mean, with birds declining at such a rapid rate as a coastal species, it's really concerning that marine algae harvests are part of that problem and if the NOP is, you know, implicit in that, then that's a problem to the integrity of the label.

And so any way that we can move that forward to show that we're doing as best we can, I think would be a positive step.

MS. OAKLEY: Thank you.

CHAIR BEHAR: Yes, thank you, and Ashley, try to speak -- I can't see you in the lists to have you raise your hand, so feel free to speak up. I'm sorry I didn't see you to call on you for the last speaker.

MS. ARSENAULT: I'm sorry about that.

Ashley is just on the phone, Harriet, so you will not see her in that list. She's in the phone listing.

CHAIR BEHAR: Okay. Next up is Steve Sprinkel, and then Angela Schriver and Danielle

NEAL R. GROSS

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

Quist on deck. Steve, can you find Steve, Michelle?

MS. ARSENAULT: Hello? Harriet, can you hear me?

CHAIR BEHAR: Yes, I can hear you, Michelle. Can you find Steve?

MS. ARSENAULT: We have not found Steve. So, Harriet, just so you know the Department's just pushed an update and my computer is restarting at the moment so I had to give over control of the webinar to a coworker. So hopefully everything is working on your end for everyone else on the webinar.

So we did not see Steve in the phone list or the webinar list. Steve, if you're there --

CHAIR BEHAR: Okay.

MS. ARSENAULT: Sorry. Steve, if you're there, you should be able to unmute your own line. Maybe you're calling in from a different number than you provided? All right, Harriet. I think it's --

CHAIR BEHAR: I'm keeping track.

NEAL R. GROSS

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

Angela Schriver, is she there, and then Danielle Quist is on deck.

MS. SCHRIVER: Yes, this is Angela Schriver. Hello?

CHAIR BEHAR: Great, go ahead. Yes, I can hear you. Go ahead.

MS. SCHRIVER: All right. My name is Angela Schriver and my husband --

(Pause.)

CHAIR BEHAR: I think we just lost you. Angela?

MS. SCHRIVER: I'm unmuted again, sorry. Thank you. I'll pick up where I left off.

So my husband and I have a rowcrop farm in Northeast Ohio. We have a split operation with approximately 200 acres certified organic and 200 acres conventional.

We had been in conventional farming for over 15 years and we chose to transition to organic for financial reasons as there's a much higher premium for grain and we were desperate to keep our farm in existence.

NEAL R. GROSS

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

However, through our three years of transition and two years of being certified organic, we've developed a deep appreciation and respect for organic agriculture and the sustainability that comes with it.

It has become something we believe in with all of our hearts. It's completely changed us as consumers, farmers, and people. We research, we brainstorm, and we problem solve and it's the most fun we've had in our lives. We believe strongly that the organic standards need to be upheld. It's a voluntary program. We make a choice to participate in it.

It's a lifestyle change and it's not for everyone. When you make exceptions such as the livestock origin standards or the GE content and the things that have been discussed Tuesday and today, you water down the standards and that hurts everyone.

That hurts consumers that believe in the organic label, it hurts farmers that believe in it, and it hurts the bottom line.

NEAL R. GROSS

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

I don't want to say that we participate in the almost but not quite organic certification label. I want to say we participate in the organic certification label.

And I think it's okay if my family can't pull weeds on 100 acres of organic food-grade soybeans because we can pull weeds on 20 acres, and it's okay if organic birds can't be produced during winter months on a large scale, and it's okay if you can't pinch off hundreds of acres of tobacco suckers.

You find every farm and farmer can figure out what they can do to their extent and if they claim it's impossible or claim that they can't keep their farm and they need those exceptions, I would want you to consider three things about humans.

They have affinity to what's familiar and they don't like change. They tend to like the path of least resistance, the easiest way. And they are extremely creative and have amazing ingenuity.

NEAL R. GROSS

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

We will all find a way to accomplish what we need to and what we want to. You do not have to compromise the integrity of the label to ensure that's possible.

And just as a side note, since we're grain farmers, I very much expect a proposal rule on the import fraud in grain because that is something that is personally an issue with us, and thank you for your time and your dedication to the organic label.

CHAIR BEHAR: Thank you very much. So I have a question from Emily.

MS. OAKLEY: I just wanted to thank you for your articulate comments and for speaking out as a farmer, and especially in terms of addressing the issue that we are creatures of habit, but that we want to maintain the rule as it is rather than allowing materials or processes that undermine it, so thank you for speaking to that.

MS. SCHRIVER: Thank you.

CHAIR BEHAR: Okay. Next -- thank you. Next up is Danielle Quist with Caleb Goossen

NEAL R. GROSS

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

and Christy Kerbs on deck.

Danielle, can you unmute yourself?
Angie, can you see them?

MS. PEGUES: I'm looking through it
right now. I do not see Danielle on here.
Danielle, if you're on you can unmute yourself.
If you're on a cell phone you can unmute yourself
with --

CHAIR BEHAR: Star six and star seven
is mute and unmute.

MS. PEGUES: Yeah, star six and star
seven are mute and unmute. I'm just going to go
through and unmute everybody.

I apologize in advance for not having
this done yet. I didn't want any of the background
noises to interfere with anything.

CHAIR BEHAR: Is Caleb Goossen on the
line?

MR. GOOSSEN: Yes, I am.

CHAIR BEHAR: Okay.

MR. GOOSSEN: Can you hear me?

CHAIR BEHAR: Yes, and we'll go back,

NEAL R. GROSS

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

too, and ask for Danielle afterwards, so go ahead, Caleb.

MR. GOOSSEN: Okay. I'm Caleb Goossen, Crop and Conservation Specialist for Maine Organic Farmers and Gardeners Association, which has over 6,000 members and over 450 certified organic farms.

I would like to thank the Crop Subcommittee for their consideration and excellent discussion of paper as a production aid, i.e., paper pots.

I am here to voice my support for the proposed listing of virgin or recycled paper as a production aid. I've heard from many of the farmers I work with that paper pots should be allowed in organic production and have not heard from any farmer hoping to exclude them from inorganic production.

While prior listings for paper were well intentioned in forbidding virgin paper fibers, reevaluation of that blanket ban seems appropriate at this time.

NEAL R. GROSS

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

New and refined applications of paper products are showing significant potential for replacing or offsetting plastic usage in crop production. Virgin paper fiber may allow for the displacement of synthetic additives in finished paper products, the content of which will always be difficult to quantify in recycled paper.

Additionally, though the listing for paper as mulch lies elsewhere in 205.601(b), I'm advocating that a similar in-depth reconsideration of virgin paper fiber allowance be considered.

I have become recently made aware of a 100 percent bio-based, biodegradable paper mulch film which is in later stages of development and product refinement. It relies upon virgin paper fibers, however.

That may be considered a small price to pay for a truly bio-based, biodegradable mulch film product with similar production characteristics to plastic mulch films, should it makes its way to market.

And if I still have time, I was not

NEAL R. GROSS

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

intending to make this comment. However, in regards to sea vegetables as a crop fertility input, I can understand ecological concerns. I just don't understand why requiring they be certified organic is the best way to address ecological concerns versus an annotation or in perhaps another manner.

Thanks again for the time.

CHAIR BEHAR: Emily, go ahead.

MS. OAKLEY: Thanks, Caleb. I actually was been wondering if I could ask you a question about sea vegetables and seaweed, so since you brought it up I will.

I heard your point, but I think the reason that we have listed organic certification is that, one, it's a tool that's already at our disposal and one that people are familiar with and as you know one that certifiers are currently using.

And, two, although we've looked at annotations of the possibility, I fail to understand how an annotation would be verified and enforced. The only thing I can imagine is an affidavit situation because without certification,

NEAL R. GROSS

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

who would actually go out and verify and monitor that the practices are being done according to the annotation. Do you have any thoughts on that?

MR. GOOSSEN: I guess I would defer to the NOSB and others in terms of how to best verify that those procedures are being done. My concern lies more upon what else is being opened with that listing.

There are many other crop fertility inputs that are not required to be organic that may have even greater ecological inputs and I don't know that the NOSB is really wanting to open up that can of worms and sort of, you know, opening up the idea that manure be investigated.

Just one example, wood ash. Where did that, or what happened to the trees that were burned to create that wood ash? I feel like the list is much greater than I can come up with off the top of my head right now.

CHAIR BEHAR: Okay. I have a question and that's about the paper pots. As we've learned that paper is not just cellulose based, that there

NEAL R. GROSS

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

are significant amounts of various types of synthetic fibers, some more biodegradable than others.

And I'm wondering, I think that's somewhat where we are struggling on the Crop Subcommittee is the type and percentage of synthetic.

In the paper pots there are some that are just about 100 percent synthetic fibers so they can remain integral for years, like, for the nursing industry, for instance. So we were just kind of wondering how you feel about synthetic fibers and should we have some sort of annotation limiting the type and percentage in the paper pots.

MR. GOOSSEN: I do feel that it would be appropriate to limit the percentage. I'm not feeling that I'm qualified to suggest what that limit should be.

I would look for a preponderance of the paper pots being utilized in organic production currently and I believe most of them are at a lower percentage of synthetic materials and, ideally,

NEAL R. GROSS

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

as I was trying to speak to, hopefully they will be able to replace those synthetic fibers with virgin paper fibers.

CHAIR BEHAR: Thank you. Okay, I don't think Ashley has a question. She's the only one I can't see. Next up is Christy Kerbs and on deck is Sam Welsch and Harold Austin.

So Christy, are you there? Angie, can you find Christy? She's a 425 area code and Angie, you're on mute.

MS. PEGUES: Give me one moment. No, I'm not seeing Christy.

CHAIR BEHAR: Okay. Sam Welsch? He's a 402 area code.

MS. PEGUES: He is unmuted, or not. It's not letting me unmute him for whatever reason.

It may be because we were trying to go back and forth, but he should be able to unmute himself.

CHAIR BEHAR: Sam, if you're on the line --

MR. WELSCH: Okay. Can you hear me now?

NEAL R. GROSS

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

CHAIR BEHAR: Yes, we can. Hello, Sam.

MR. WELSCH: Hi, Harriet.

CHAIR BEHAR: Yes, you can start speaking now.

MR. WELSCH: All right. Well, thank you everybody for all your time. I wish I could be a speed talker so I could get through everything I would like to say.

Regarding paper pots as was just discussed, paper is not just cellulose, and in fact, there are 100 percent synthetic papers now on the market. We are just also recently beginning to see research on the previously unknown effects of microplastics on microorganisms.

So I would urge you to look at to the extent possible to only allow natural fibers and polymers in paper pots and prohibit synthetic fibers and polymers. I'll just keep moving through my list here.

Ion exchange is a chemical process. I know that's something that's been coming up and

NEAL R. GROSS

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

it's used for many things, some which we have no problem with in terms of water treatment, but when it comes to creating and refining products, it is a chemical process.

The term ion exchange means that there are ions that are being taken out and put in to the products. A substance is often dissolved in a solution, ions are removed, the remaining substance is precipitated from the solution, and the result is a substance that is not the same as the initial substance. There was a chemical change.

This occurs with many types of products but I'm especially concerned that the result of this is that non-agricultural substances as defined by the regulations are now being in some cases certified organic, which creates a kind of logical inconsistency.

How can something that's required to be put on the National List to be included in a product also be certified organic, and I know some things may be misidentified like natural flavors.

NEAL R. GROSS

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

When we get an affidavit that a flavor is natural it only means that the flavor components of that product comply with the FDA's definition of natural which does not match entirely the USDA's definition of natural in the organic regulations.

And there are thousands of these flavor components that may be derived from plant or animal materials but they are so refined and extracted that the identity of the agricultural product from which they're made is completely unrecognizable.

Vanillin would be one example. It does not come from vanilla beans, it comes from cellulose as one example. It comes from other substances, too. So these flavor extracts are certainly not agricultural, and do we really want to see things like organic benzaldehyde being certified? Sorry, I wasn't --

CHAIR BEHAR: That's okay.

MR. WELSCH: Go ahead.

CHAIR BEHAR: Yeah, Sam, you reached your three minutes and I just want to say that we are looking at ion exchange and we were requested

NEAL R. GROSS

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

by the National Organic Program that the NOSB look at that process. So thank you for bringing that up and be aware that it's on our radar.

Steve, you have a question for Sam?

VICE CHAIR ELA: I do, and coming back to your comments on paper pots, Sam, and the cross committee has certainly struggled with that issue of do we include synthetic fibers or not.

It feels like at this point that probably paper pots can't be made without some small amount of synthetic fibers and so we're hesitant to put an annotation that says there can be no synthetic fibers.

However, we don't know where the limits are on that, so it's certainly something we're wrestling with. Would you -- if we linked the synthetic fibers similar to the biodegradable mulch listing that's linked to custom entry standards requiring biodegradation, what are your thoughts on that? Making sure if there are synthetics they have to be biodegradable.

MR. WELSCH: It seems to me that what

NEAL R. GROSS

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

I've understood is that even biodegradable plastics or so-called biodegradable plastics end up just breaking down into microplastics, that it doesn't really biodegrade at the molecular level and there are effects on microorganisms in the soil when that happens.

My preference would be if you'd have an annotation that says 100 percent natural fibers must be used when they're commercially available and I suspect that somebody will be creative with the big influx of hemp that is being grown in this country.

That somebody's going to figure out how to make the right kind of paper for paper pots from hemp fibers which are much more durable than cellulose and are used to replace plastic or synthetic fibers in many uses including fiberglass.

CHAIR BEHAR: Okay. Thank you. I see Tom and then Emily have questions. Go ahead, Tom.

MR. CHAPMAN: Can you hear me?

CHAIR BEHAR: Yes, we can hear you.
Thank you, Tom.

NEAL R. GROSS

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

MR. CHAPMAN: Great. Hey, Sam, I didn't understand your last points. Were you suggesting that products made with certified organic inputs that were processed to the standards under reliable practices in the standards not be allowed as organic based on the complexity of their name?

MR. WELSCH: I was suggesting that when you start certifying non-agricultural products you create a situation where the USDA, because the organic regulations are for agricultural products, that when complaints have been sent in about people calling non-agricultural products organic, there's no enforcement that can take place, so that's one aspect of --

MR. CHAPMAN: Can you give me an example of that?

MR. WELSCH: Well, there's plenty in cosmetics and soap products for example.

MR. CHAPMAN: I'm hearing no one enforcement, but I just read an article about a \$1.76 million dollar settlement with the FTC about

NEAL R. GROSS

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

fraudulent organic cosmetics.

MR. WELSCH: Yeah, that was FTC not USDA and that may be why it was FTC that was doing that investigation.

MR. CHAPMAN: So your concern is that the USDA doesn't have enforcement authority, but other agencies having that doesn't negate that concern?

MR. WELSCH: It certainly does not eliminate it. You know, part of the problem is it's hard to get consistency on how that would be done and if the NOP doesn't feel like it has enforcement authority, we're not going to get guidance from them on how to do it consistently.

I'm not sure how to explain it carefully but the non-organic substances, you know, it's like certification is for organic products and when you start certifying non-organic substances, you're creating a complication that you're starting to certify these fractions or isolates that are individual molecules -- or you have the potential for doing that -- that really don't sound very

NEAL R. GROSS

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

organic when you have the name of them followed by the word organic and I think that's very damaging to the organic brand because it implies a certain affinity to natural substances.

And obviously you can only use natural substances and you can only use synthetics that are put on the National List to make these products, but you can have things that end up being synthetics that are derived from agricultural products that could potentially be certified if we don't make a clear line and say that organic certification should only be applied to agricultural substances not non-agricultural substances or synthetic substances that are derived from agricultural substances.

MR. CHAPMAN: Let me ask one last follow up if I can because I'm still confused. You said it wasn't about the name, but then you just said the name again. We don't want organic associated with some of these names.

And I guess that's some of the confusion I have is that, let's take glycerin as an example,

NEAL R. GROSS

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

where we just recommended adding it to 606 because one selection method we get fermentation and then a couple others using steam and pressure to produce organic glycerin from organic agricultural inputs, where other processes can be quite synthetic.

They can be produced from fossil fuels.

They can be produced from agricultural inputs but through synthetic processes. So there's multiple ways to make a finished product and you're saying just because one of those ways is synthetic we shouldn't allow the organic versions to exist. Is that --

MR. WELSCH: Well, I probably misspoke that I mean it's both about the name and the impression it gives, as well as about what's the effect of that. Glycerin's a great example because it can be made from an agricultural substance but glycerin is made through a chemical reaction.

And as soon as you allow things that seem to be somewhat benign or less concerning like glycerin to be certified organic, you open it up to all kinds of other synthetic and

NEAL R. GROSS

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

non-agricultural substances that could also be made through similar methods.

And you could end up with a situation where you have a substance that cannot be allowed in an organic product because it's not on the National List, but then somebody certifies it and what's its status at that point?

It's a synthetic or it's non-agricultural. Can it be allowed or not? Is it allowed because somebody got it certified even though if it was not certified it couldn't be allowed? Those things are some kind of logical inconsistencies when you start allowing things that would otherwise have to be put on the National List to be used in an organic product.

You also have products that are made from organic substances and then combined with chemicals on the National List that result in things that are synthetic preservatives and those are currently being marketed because they're made from fermentation products as a cultured wheat starch, for example, rather than labeling it as a

NEAL R. GROSS

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

preservative, which it actually is.

So it's kind of opening the door to all kinds of things that are not yet seen in the market.

It's like opening the door to things that we really don't to have certified organic.

CHAIR BEHAR: Okay. Emily, you have a question?

MS. OAKLEY: I do. This is to go back to the paper pots issue. So the Crop Subcommittee has spent a tremendous amount of time discussing this topic and, like you, we certainly don't want to have a tremendous number of synthetic fibers in these materials and have explored the possibility of 100 percent natural products.

But what we're struggling with is not creating a listing that is more strict than the current paper listing in terms of synthetic fibers and, I'll also add, adhesives.

So I was wondering what your thoughts were on how we address the existing listing in terms of the synthetic fibers and adhesives that are in paper that are currently used and the paper pots

NEAL R. GROSS

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

situation. Do you have any thoughts on that?

MR. WELSCH: I think it might be good to revisit the current listing based on information that we have today. The paper that was in use 20 years ago is not the same as what's in use today, so what was added to the Natural List before was different.

I'd also urge you to separate this listing from any other listing. I see this all the time in certification that when we start to base our decision on previous decisions, we start to move away from compliance with the regulation.

So rather than using the other listing for paper as your reference point, use the regulations and the law as the reference point for this listing, and if that makes it inconsistent with the previous listing, then you may need to go back and revisit that one, as well.

MS. OAKLEY: Thank you.

MR. WELSCH: Yeah, people are innovative so if you make strict requirements, someone will come up with a solution that meets

NEAL R. GROSS

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

that stricter requirement.

MS. OAKLEY: I appreciate your feedback. Thank you.

CHAIR BEHAR: Thank you, Sam.

MR. WELSCH: Thank you, everyone.

CHAIR BEHAR: Yes, thank you. Next up is Harold Austin, with Jennifer Wasieleski on deck.

And I'm just wondering if Michelle or Angie, or both of you, can look to see if Dick Atlee, Linda Coleman, Steven Sprinkel, Danielle Quist, or Christy Kerbs have shown up. Those are the people who, so we could do them after Harold, if you can find them. So Harold, can you unmute yourself?

MS. ARSENAULT: I believe I can unmute you, Harold. Harold, if you're talking I can't hear you. Oh, there's a throwback to the old days, Harold. Harold, I'm having trouble unmuting you on my end but I see you there. Nope. I'm having difficulties. I'm needing Harold's mic kicked in.

CHAIR BEHAR: Okay.

MS. ARSENAULT: What's the issue?

CHAIR BEHAR: Yeah, sometimes there's

NEAL R. GROSS

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

a little bit of a delay, Harold. So if you click on it and we still can't hear you, just wait a little moment and keep talking.

MS. ARSENAULT: Nope.

CHAIR BEHAR: Okay, so that's not working. All right. Well, add him to the list. We will come back to you. Harold, you are not forgotten.

Jennifer Wasieleski from Kerry Ingredients, are you there?

MS. ARSENAULT: I didn't see Jennifer on the line with us. I've been looking for her.

CHAIR BEHAR: Okay. Next up then is Jane DeMarchi, with Bob Durst on deck. Any luck with Jane DeMarchi from ASTA? Okay. That's a lot of scratching that I hear. Bob Durst, are you there? Can you see Bob Durst, Michelle?

MS. DeMARCHI: Hello? This is Jane DeMarchi. I'm sorry. I don't know, it didn't unmute for some reason. Can you hear me?

CHAIR BEHAR: Yes, we can.

MS. DeMARCHI: Okay.

NEAL R. GROSS

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

CHAIR BEHAR: Go ahead and you can start speaking now. Thank you very much.

MS. DeMARCHI: Thank you. So my name's Jane DeMarchi. I'm with the American Seed Trade Association. ASTA represents over 700 member companies involved in seed production, distribution, plant breeding around North America and our members produce row crops, vegetables, grasses, cover crops.

And we would like to provide comments on the Materials Subcommittee proposal related to the instruction to certifiers. And just as a reminder on these comments, if a producer follows the production practices laid out in the organic production system's plan required for NOP, only the intentional use of a product produced by an excluded method would prevent that seed or another organism from being certified as organic.

So we appreciate the significant changes that NOSB has made to the genetic integrity proposal, but we do continue to oppose what could turn into a de facto requirement for testing of

NEAL R. GROSS

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

seed in the National Organic Program, and we continue feel the issues are best resolved in the marketplace.

As I believe all of you are aware, the Organic Seed Alliance conducted a seed company survey on advantageous presence which was focused on current testing conducted by seed companies for the presence of GE or GMO traits.

And, you know, some of our feedback is that seed companies should not be required to provide information on levels of GE or GMO presence for genetic events or constructs for which there are no commercially available tests.

We would also suggest that under Recommendation 1(a) that the wording is changed so it would read producers who are growing crops from seed or planting stock that could be subject to genetic engineering presence in that seed or planting stock can contact their seed supplier to obtain information regarding the levels of GE presence in that seed.

Also, as you guys are aware, in that

NEAL R. GROSS

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

survey it noted that most companies are willing to provide detectable levels to customers upon request, but right now very few do make request.

And also that report indicated that advantageous presence is not in fact a widespread problem.

We continue to feel that the information sharing around testing is best solved in the market, based on the market needs. And just as a reminder, testing is not regularly done in some crops where there is very low adoption of GE or GMO technology, as an example, squash or potatoes.

Lastly, we support the idea of forming a task force for more conversation around these issues and would even suggest that that get extended beyond just seed suppliers, to go further into the value chain to look at advantageous presence along the full organic value chain.

I have a little time remaining. I just wanted to make a comment also on the excluded method determinations.

We're continued to be worried that some

NEAL R. GROSS

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

of the proposed methods on the excluded method list are really vital components of current plant breeding and really enable plant breeders and growers to address evolving threats from pests and diseases which are continuing to evolve rapidly due to things like climate change.

And in particular, we're quite concerned about the intention to potentially include double haploid technology as an excluded method in the future. And in the current proposal we are concerned about the induced mutagenesis proposal because these changes to the current processes are not distinguishable from those that would occur in traditional plant breeding. And for that reason we do not think that they should be excluded.

And with that, I am done with my comments.

CHAIR BEHAR: Okay. Well, I have kind of a question although it might be more of a comment.

And that is we've heard a lot from the farmer community. Do they really want this transparency

NEAL R. GROSS

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

in the possible presence of genetic engineering in seeds that they purchase?

Because they have a market that they're trying to meet with the crop that they are growing from that seed, and if they're trying to meet a point-one percent market and the seed that they buy is point-two percent, then they are already never going to make that market.

And so maybe they shouldn't sign that contract. And I think each farmer has a different level that they would meet for their own use, and it could even be tied to price.

So perhaps a farmer was going to feed that crop to their own livestock and they're not trying to meet a contract for that crop at the end of the season. You know, a little bit more presence would maybe not be an issue for them, maybe it would.

So we were trying to have transparency and that's why that was in the name of the document.

So I understand there's many issues but we're hoping that as farmers would be told that this testing is being done and that they can ask.

NEAL R. GROSS

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

Because many farmers were unaware of that, that they could be asking their seed producers for those levels.

Maybe it will become even easier for the seed companies to put it in the catalogue, on the tag, and have it be more transparent. Because right now there is somewhat of a burden that the farmers have to call and ask the question.

So I guess I'm just kind of, I know that right now you're not getting a lot of questions, but I actually think you will start getting more as it becomes more known in the farming community that this testing is being done.

So I'm not really sure you can respond to my comments or --

MS. DeMARCHI: Well, no, I mean, I think that's one of the benefits of the survey that the Organic Seed Alliance did is. I think what you can see there is 80 percent of the companies that were surveyed are willing to provide that information. So I think raising awareness that that type of information is available to farmers,

NEAL R. GROSS

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

that seems to be a reasonable approach.

I think that there is some concern that if everybody all of a sudden goes to asking for the information, that is a shift, and companies will need to address that.

But you rightly pointed out that there's different needs in the marketplace and I think this is why we keep going back to the idea that it really is between the seed seller and the seed buyer to try and determine what is the level of information that is actually required.

CHAIR BEHAR: Okay. I don't see any other questions.

MR. MORTENSEN: Harriet, this is Dave. Can you hear me?

CHAIR BEHAR: Oh, Dave, okay. Dave Mortensen, go ahead.

MR. MORTENSEN: Thanks, Harriet. Thanks for your comments, Jane.

You know, I think I am reiterating what Harriet just said, but the goal of our work is to help folks to better understand what they're

NEAL R. GROSS

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

working with. And I would submit that the reason there aren't that many people asking for the information is that I would be fairly certain most folks are assuming there isn't contamination in the seed that they're buying.

And insofar as making the information available, if you are to be inundated with so many people asking, this would be a simple case, in my view, of just providing additional information.

It could be web-based information on the cultivars that are being handled by a seed sales company in the way that many larger seed companies would have such information available on cultivar performance or sensitivity to a range and practices that the farmer might choose to perform.

So it feels manageable to me, so that's just reacting to a couple of your comments there.

MS. DeMARCHI: So I think what mean to say is that a company could commit that their products -- their intention is to meet a certain level. Is that what you're saying?

MR. MORTENSEN: It is to say that they

NEAL R. GROSS

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

would be meeting levels and making the information available to folks, that what level of purity exists in the germ plasm that they're selling.

And obviously to the point that you made earlier about requiring folks or strongly suggesting that they do something where a test is unavailable. We certainly are not wanting folks to do that, which would be impossible to do.

But where the test would be available, the test results would be available on the seed.

MS. DeMARCHI: Yeah, well, I think that you'll notice that there are some companies in the organic market that are actually proactively marketing the levels that they are selling, so we're seeing some of that in the marketplace.

MR. MORTENSEN: Thanks.

CHAIR BEHAR: Okay, thank you.

MS. DeMARCHI: Thank you.

CHAIR BEHAR: Next up is Bob Durst and then Colehour Bondera, and then we will go back to the people we have missed. Is Bob Durst there? Can anybody find Bob?

NEAL R. GROSS

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

MS. ARSENAULT: Harriet, I did not find Bob. Bob, if you are on the line with us you can unmute your own line. I'm not seeing his name or anyone from that area code in the phone list, Harriet.

CHAIR BEHAR: Okay. Colehour, how are the Hawaiian breezes? Are you there?

MS. ARSENAULT: Let me make sure Colehour is unmuted.

CHAIR BEHAR: Aloha, Colehour.

MS. ARSENAULT: We just lost Colehour --

MR. BONDERA: -- hear me?

MS. ARSENAULT: There we go. We've got you, Colehour.

CHAIR BEHAR: Yep.

MS. ARSENAULT: Yes, go ahead, Colehour.

CHAIR BEHAR: Hello.

MR. BONDERA: Very good. Thank you. I wanted to start by saying thank you to you, Harriet, for making this all happen, and Michelle,

NEAL R. GROSS

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

thank you for the logistical help. I appreciate all of your time and energy.

So I want to make three relatively simple points, in my opinion, but I think they're important. The first one really is that for me it comes down to the concept of sunsets, which is not a fun concept for the NOSB or the NOP. But it means that things go away. And I really, honestly think that even though habits are hard to break. Like we've already heard, and it's true, that non-organic celery needs to be removed from our lists of being allowed. Even though it's been allowed for over a decade, I think that it's not necessary for our nitrates and organic meat in terms of us recognizing that organic and conventional aren't the same.

We don't need to be trying to do the same things with everything, and I feel exactly the same. Honestly, after spending a lot of time as an NOSB member working on it, regarding relisting of synthetic methamphetamine, I think that we simply need to -- if sunset doesn't any longer exist, as

NEAL R. GROSS

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

meaning going away, the sun setting, then we need to put a date on it for it to go away.

So that's my first point. My second point is really a broader point which I kind of made in my written testimony, but I think it's very important for reiterating and exemplifying.

And I can go on and give a brief example, because I think that the concept of GEs and genetic engineering and all of this being allowed in organics, I think the NOP needs to prioritize putting forth what we have already said as an entity, as an advisory entity.

And, you know, on this island, my wife, in the early 2000s, outside of the organic topic but because of the organic topic, we went as a family actually around the island, when GE papayas had been introduced on this island in Hawaii because it's an isolated space, that's why they did it, and guess what, from random samples that we randomly took as a family, us and our two little children, we randomly took papaya samples around the island from wild and farmed places. Fifty percent were

NEAL R. GROSS

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

GE, and it wasn't because people had planted it.

It's because the way that pollination occurs is through every means you can imagine with GE papayas, every single way you can imagine.

And the reality is you can't get rid of it once it's there and it contaminates everything in all of the organic and conventional producers who don't want it.

My final point is we need to really recognize, and I think I listened to some of this testimony today and I was really impressed with somebody who I have never met, and then I'll find out that I do meet but I'm bad with names. But Angela Schriver, who said some really important things, I think, to you all in terms of the fact that organic farmers aren't generally into compromising and just getting rid of things. We need to keep our integrity.

Look, I'm not being paid by anybody right now, except for, guess what, I'm being not paid by my farm work which I need to be coffee harvesting right now, so I'm getting the opposite

NEAL R. GROSS

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

of getting paid by testifying to you.

But I think it's critical for you all to listen and recognize that we need to stay together and stay strong as a foundation so that we can actually have something that actually means organic, versus everything is organic unless 25 hoops were jumped through to make it not organic.

And so, I think that I really request of all of you to recognize that the common foundation we need to hold and stand firm with it together, and, even though I'm not necessarily your last testifier and I know where you're all at in terms of listening to testimony and hearing all of this, I think that that's where we need to be building from and working from.

So I will just close by saying what I said at the beginning which is, thank you and we organic farmers aren't going to go away. We're still here and still wanting organic to mean organic.

CHAIR BEHAR: Thank you, Colehour.
And I think you're so well coming from -- to the

NEAL R. GROSS

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

beauty of a functioning organic system in an agricultural setting is really something that I very much enjoy seeing when I'm an organic inspector out there visiting farms, and so much my own farm when I see things, when I see my soil improving, I see my insect control improve, when I increase my beneficial insect habitat, and all those things.

So I understand what you're saying.

I see Steve has a question for you.

VICE CHAIR ELA: Pardon my ignorance on Hawaiian agriculture and papayas. I remember talking to a papaya grower a few years ago who noted that the GE papayas were introduced to prevent some kind of disease, which I can't remember what, I'm embarrassed to say, but --

MR. BONDERA: Ringspot virus, that's fine.

VICE CHAIR ELA: Ringspot, yep. And so I mean, obviously, there are papayas surviving that are not GE. How, organically, do you deal with ringspot virus?

MR. BONDERA: You don't have to, except

NEAL R. GROSS

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

for have any organic supplier or producer would have said to the Cornell professor who came to --

(Inaudible due to telephonic interference)

CHAIR BEHAR: We kind of lost you there, Colehour. Can you repeat that?

MR. BONDERA: Oh, can you hear me now?

CHAIR BEHAR: Yes.

MR. BONDERA: Apologies. Like it was said, when the GE papayas was brought here it's like we're going to save the industry, and the truth is that all that you need to do to save the industry is, guess what, you don't monocrop papaya varieties and you don't monocrop papayas. And that's the simple solution for not having to deal with the transmission of the ringspot virus between papayas, which is the question, because it's only susceptible to certain varieties and it's only susceptible in monocultural growing conditions.

And so that's how organic papaya producers and conventional papaya producers were getting around that originally when they brought

NEAL R. GROSS

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

it in, and still to this day. There's not really an issue.

It's just, the issue is if you want to switch it over to a conventional practice where you're doing thousands of acres of monoculture. You're going to have these disease and pest problems that you can't eradicate without, you know, using this other approach.

And that goes back to my original comment which was -- not original comment, but my comment, that what we need in the organic industry is not be trying to replicate the path that conventional agriculture has gone down, because it's not going to be healthy or balanced for the system at all.

And there's plenty of papayas growing that are not GE, so --

VICE CHAIR ELA: Thank you very much.

It's something I've wondered about for a number of years, so I appreciate your ecosystem approach. That's great.

CHAIR BEHAR: Okay. I don't see any

NEAL R. GROSS

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

other questions.

MR. BRADMAN: Harriet, I have a question.

CHAIR BEHAR: Yes? Okay, Asa, go ahead.

MR. BRADMAN: Yeah, your comments on the celery. I think that refers to celery powder, and I think that's something all of us have concerns about. And the handling committee actually voted unanimously not to remove it.

I think that was based on, essentially, can we develop an organic source -- and actually there's been a commitment now from substantial firms to support development of organic celery for processing.

I wonder how you feel about that, and then of course there's a related issue that has been raised about the potential health impacts of nitrates and nitrites from any source.

But if there were an organic celery, is that the kind of sunset that you're looking for, to push towards?

NEAL R. GROSS

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

MR. BONDERA: Yeah, and I think that, I mean, your comment isn't off base, and I think that people recognize that they have to do it, but my understanding has been -- I don't grow celery or actually cure meat, either so this is a little out of my personal experience.

But my understanding is that organically grown celery doesn't have high enough levels of nitrate to be used in curing meat, and so maybe that can be increased over time, like you're suggesting.

But what I was trying to get at is, you know, we need as an organic industry to stop saying we're going to do everything exactly the same as the way it's done and what do we need to do that, versus can we use a different psychology and say maybe we aren't going to be doing every single thing.

Maybe that's okay. We don't need to just make it conventional just because we can't figure out how to do it organic. So does the potential development of an organic celery that

NEAL R. GROSS

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

would function make sense?

Possibly. But then, like you just brought up, are the health ramifications, environmental and health ramifications, are they going to be dealt with anyway, or are we going to be still ignoring those components of nitrates being used in food.

MR. BRADMAN: Right, and I think --

MR. BONDERA: I don't know that one's going to solve the other, is my point.

MR. BRADMAN: Yeah, and one of the challenges that comes up on the Board is that if we accept something that, you know, is kind of part of the five percent that's not organic, does that then facilitate production of more organic products that of course hopefully is truly organic in the sense that we're all concerned about.

MR. BONDERA: Well, and I'll repeat what I quoted was just, I don't know who I'm quoting it from, but it's true. Habits are really hard to break and now we're in it. The conventional celery has been permitted since '07 or something.

NEAL R. GROSS

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

So it's been a lot of years where now, you know, it's just like with the synthetic methylamine in question. It's like how can we get out of this gulch that we've dug ourselves.

And I think that that's one of our hard issues and I don't think there's a simple answer, but I do think that the answer has to be thinking about what are we trying to be building upon. And if we're going to have a foundation that can't hold us, we're not going to stand up.

MR. BRADMAN: Yeah, thank you. I appreciate the comments. It's a long way to Pittsburgh from Hawaii, so I'm glad we have this format.

MR. BONDERA: Aloha. Yeah, I know. I can't make this meeting because of that.

CHAIR BEHAR: Okay. Steve, did you already ask your question? Your hand's still raised, so I was just wondering.

VICE CHAIR ELA: I did. I'm sorry, I didn't get it lowered. Faux pas, I'm sorry.

CHAIR BEHAR: Okay. Okay, so

NEAL R. GROSS

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

Michelle.

MS. ARSENAULT: Yes, ma'am?

CHAIR BEHAR: I'm going to go backwards. Bob Durst, or Jennifer Wasieleski?

MS. ARSENAULT: Bob is on the line, but first let me mute Mike.

(Simultaneous speaking.)

MS. ARSENAULT: So I've been momentarily skipped over. Danielle is here, Harold is here, and Bob is here. And apologies to you guys for not being able to get you unmuted. So Bob, you should be able to talk now. Let's see. Say something and let's see if we can hear you. Nope, not yet. Okay, try now.

MR. DURST: Okay.

MS. ARSENAULT: There you go. We got you.

MR. DURST: Okay. This is Bob Durst with Simple Organic Solutions, and I signed up for the call early on because I expected that the NOSB meeting this time was going to, at least initially, address the ion exchange issue. It looks like

NEAL R. GROSS

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

that's been pushed back, but I'll still comment on it, that this is something that I'm glad you're looking at and I'm looking forward to further discussions about it.

But I think that the proposals that NOP put out to restrict this in short order is short-sighted and definitely needs to be looked at and a time frame for this seriously reviewed, because of the impact that this is going to have on the wide usage of these materials.

And I have no problem with them being reviewed, but because these technologies and materials have been in use for a long time, widely used in organics and in the water treatment facilities that are making water that are going into organic products.

We need to have time to go through the proper TAP reviews and petition process, et cetera, to make sure that these things aren't just cut off before that review happens.

And so we'll certainly address this later on when this comes up probably in the April

NEAL R. GROSS

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

meeting. But that's the gist of the comment that I had, although I will point out a couple things.

Earlier in the call there were a number of people talking about fraud, and I know that that's happening, and almost exclusively people were talking about fraud with international products coming in.

But don't forget that there's also a lot of domestic fraud going on. I've had a couple of clients that have lost millions of dollars to misbranded product coming from the domestic market, and that definitely needs to be addressed also. So don't forget to look at those. That's it.

CHAIR BEHAR: Okay. Thank you, Bob.

I don't see any questions, and then you said that Danielle Quist is available, Michelle?

MS. ARSENAULT: Yep, Danielle is on the line with us and I'll make sure she is unmuted now.

MS. QUIST: Can you hear me?

MS. ARSENAULT: Yep, we can hear you, Danielle.

CHAIR BEHAR: Great.

NEAL R. GROSS

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

MS. QUIST: Wonderful, wonderful. Thank you for fixing whatever issues you were having before.

Good afternoon. My name is Danielle Quist. This is my first time speaking to everybody here. I am presenting today on behalf of the International Dairy Foods Association.

I really do want to thank the Board for this opportunity to talk about initiatives of great importance to our IDFA members. We take organic milk and process it into just wonderful organic dairy products.

So today I wanted to talk to you a little bit about this upcoming review for dairy cultures.

It is my understanding that the subcommittee would like to combine dairy cultures with microorganisms.

And I hope that the Board can appreciate how central dairy culture ingredients are to organic dairy producers. They are critically necessary for any kind of cultured dairy product, any kind of hard cheeses and cottage and other spoilable cheeses, buttermilks, yogurts, cultured

NEAL R. GROSS

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

butter, just huge segments of the dairy industry.

My understanding is that our organic members really do strongly oppose any recommendation to combine dairy cultures with microorganisms on the National List, particularly in the context of sunset review.

They support keeping the listing separate. And I think part of the problem is that with such a need for the Board during this sunset review, is whether to maintain dairy cultures as a category of materials, not whether the categories should be combined with others. More efficiencies would reduce redundancies. And if a material is redundant, that poses in the way of different questions what we seem to require under the sunset review evaluation criteria.

So whether you're looking at yeast, whether you're looking at dairy cultures or other microorganism, merits of the separate or a combined listing, we think that there's a better process for that, whether it's an efficient system with criteria, it really gives full opportunity for the

NEAL R. GROSS

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

public to comment.

We also oppose this condemnation because dairy cultures, they are a subset of microorganisms. They really serve a very unique and technical and functional purpose from other microorganisms. It really sets them far apart.

Therefore, we really don't think that there's a redundancy there and they should maintain their separate listing. These unique and technical functional purposes, it's because of that, combining them under the larger umbrella of microorganisms would be a problem.

For our dairy members, they believe that their customers know the term dairy culture.

They've become used to the term. It appears on the product's ingredient statement. So worse than the word microorganisms on a product, say a package of yogurt, in lieu of dairy cultures will cause a lot of confusion from customers who are looking to understand what is in their organic ingredients.

And I'll stop there. I heard the buzzer. Thank you very much. I very much

NEAL R. GROSS

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

appreciate your time.

CHAIR BEHAR: Okay, Steve, you have a question.

VICE CHAIR ELA: Yeah --

(Simultaneous speaking.)

VICE CHAIR ELA: I mean, I don't know of any reason that if dairy cultures are combined with microorganisms -- and I could be wrong, I guess I'm not a regulator -- that they still couldn't be listed as dairy cultures on the label, they would just be part of a larger allowed grouping than on the National List and it would mean that we wouldn't have to do two sunset reviews. I mean, obviously, any of the microorganisms, I think the argument can be made, they all have unique and functional properties that are very different from each other.

And I certainly don't dispute that the dairy cultures have those unique and functional attributes, as well, and I guess I hear and I accept your reservations about combining them.

But if they were combined, what would actually be the negative to your people? What

NEAL R. GROSS

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

would go away?

MS. QUIST: So, well, you said if they're still allowed to put the word dairy cultures on the product itself, the ingredient statement, a lot of consumers look to see -- look onto the organic list to see products, and if they don't see dairy cultures they may assume that, well, dairy cultures is not an organic ingredient, it can't be on the product and they would have to find that underneath the larger umbrella of microorganisms.

And a lot of our organic processors are very concerned about transparency. So changing, not changing the labels of food in the category could be seen by their customers as a lack of transparency when their goal is complete transparency on the label.

MR. CHAPMAN: So this is Tom. My questions are really a follow up to Steve's in that I'm still trying to fully understand the impact. Already there's a common practice to label, say, each specific type of culture, lactobacillus, whatever, and those aren't listed on the National

NEAL R. GROSS

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

List as the general term dairy cultures.

So it's clear that you can use whatever terminology to accurately describe the ingredients used in the product, regardless of how it's listed on the National List. And there's already listings that are not appearing on the National List that are used by dairy companies.

So, to get back to Steve's point, what wouldn't be available today if we remove dairy cultures but kept microorganisms? What dairy products would go away?

MS. QUIST: I think there's just a feeling that dairy cultures is a separate and unique microorganism, much like yeast is, and I think there's a process issue here.

I think a lot of our members felt like this was not -- they didn't think that if the word dairy cultures was taken away, it would be because it was for cause, there was some reason to do so.

It has to do with a listing on the List, not for reorganizing the list or combining with other ingredients.

NEAL R. GROSS

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

And I think that you're going to hear at the actual meeting later in the month from some of our members who are going to speak about, particularly to their brand, what problems with moving dairy cultures from the List could cause for them in particular and I would encourage you to ask them those specific questions.

MR. CHAPMAN: Yeah, I will. And so, to quickly follow up, you cited yeast as a similar classification, but the reason behind having yeast as a separate classification is because we require organic yeast usage in certain applications.

So would you be met with the same stress by which we're looking at requiring organic dairy culture usage in certain situations?

MS. QUIST: I think that would be a question for the individual brands and the products and the individual ingredients that they use.

MR. CHAPMAN: Okay. Thank you.

MS. QUIST: Thank you very much.

CHAIR BEHAR: Okay. Thank you. Any other questions? I think we're good. Is Jennifer

NEAL R. GROSS

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

Wasioleski with Kerry Ingredients here?

MS. ARSENAULT: Harriet?

CHAIR BEHAR: Yes?

MS. ARSENAULT: I have not found anyone else but Harold is on the line waiting patiently.

CHAIR BEHAR: Oh, good. Okay. Harold?

(Simultaneous speaking.)

CHAIR BEHAR: Can we hear you?

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

CHAIR BEHAR: Yeah, we can. Thank you.

MR. AUSTIN: All right, and thanks for finally getting around to me and solving the problems. I appreciate it.

My name's Harold Austin. I am an organic consumer, a former member of the NOSB and I am the current Chair of the Northwest Horticultural Council's Science Advisory Committee, and their Organics Subcommittee Chair, as well.

NEAL R. GROSS

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

Thank you all for the opportunity to provide oral comment to the full Board. The Pacific Northwest forms a combined total in excess of 35,000 acres of organic apples, pears, and cherries producing over 90 percent of all the fresh organic apples grown in the continental United States.

I've already provided written comments on the importance to our industry that the following materials have. For crops, hydrogen peroxide, horticultural oils, pheromones, potassium bicarbonate, and magnesium sulfate. For handling, activated charcoal, hydrogen peroxide, and peracetic acid.

These materials are also important to our organic wine, grape, and blueberry industries and farming practices, as well.

I also would like to state my support for those other materials currently under sunset review for both the handling and Crop Subcommittees. I know how important that these are to our many organic stakeholders in their

NEAL R. GROSS

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

day-to-day operations.

Organic stakeholders have built their systems plans with many of these materials that you will be discussing at your meeting as an intricate part of their plan. How? Because prior members of the NOSB allow them access to these materials.

Why? Because there was a need that they felt justified their addition to the National List. If that need still exists and there is not a proven and sustainable organic alternative material or a new process in place to replace it, then that specific material should be allowed to stay on a National List until it has been proven to no longer be needed or there is a true and legitimate rationale for its removal.

I'd also like to give my support in the proposed changes to the NOSB policy and procedure manual. Well done, guys.

Livestock subcommittee, I'd like to give my support for the continued listing of L-methylamine. This is a material that is critical

NEAL R. GROSS

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

for flock health, and a material that I think, at least for the time being, should continue to be relisted.

Finally, for your verbal update that you'll be giving at the meeting on sanitizing materials. It is of critical importance that we maintain as broad a spectrum of sanitizers for use in both crop and handling operations as possible.

Pathogen control and resistant management are the two biggest concerns that we must consider when using any of these materials in our organic operations because the options we have are so few.

Flexibility and how these materials may be utilized is also important because the factors that determine that may change from time to time depending on the situation and other contributing factors.

I firmly believe that the current system of sunset review is adequate to deal with these materials, and to try to create a new process for the NOSB may prove to have unintended

NEAL R. GROSS

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

consequences to the stakeholder's ability to continue to use these materials as they've been doing.

Thus putting not only the organic stakeholder operation at risk, but potentially creating a serious concern for food safety compliance.

And I would like to give my utmost thanks and appreciation to Harriet, to Tom, to Ashley, and Lisa for your dedication and your time on the Board and your service to our organic community.

Thank you all for all of the time that you've given to our community.

CHAIR BEHAR: Thank you, Harold. Any questions? Steve, I saw that your hand's up but I think that's from the previous speaker.

MR. CHAPMAN: I just had a quick statement. I thank Harold for his service as the last handling member to sunset ops, prior to myself.

It shows how hard it is, all of us who've spent all this time that we turn to other handling members

NEAL R. GROSS

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

that haven't been able to return.

But thank you, Harold, for your service and, of course, thank you to the rest as I kind of lead to our sun setting off with me at the end of this meeting.

MR. AUSTIN: Thanks, Tom.

MR. MORTENSEN: I had a question. This is Dave Mortensen.

MR. AUSTIN: Hi, Dave.

CHAIR BEHAR: Okay, Dave.

MR. MORTENSEN: Yeah, I was -- and I'm not challenging what you're saying here. I'm actually asking for some clarification on a point that has come up over the course of the past several meetings.

Could you, with respect to the sanitizers and the resistance management, could you give us some examples of what organisms are arising as a threat that could be evolved through existence to other sanitizers, whether it were adding an additional compound mix for an integrated approach to suppressing the resistant strain?

NEAL R. GROSS

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

MR. AUSTIN: Well, part of my comment on that is looking at both from the crop's perspective as well as our process and our handling side of the business.

We're dealing with various pathogens, with Listeria and E. Coli. Out in the fields, we're dealing with the fungi like powdery mildew, fire blight. Where we've learned in the past that a lot of the pesticides that we use, if we continue to use those over repetitive applications and over several years, we immediately begin to show resistance building up to them.

Because we have so few tools in our toolbox and because we do use some of these materials in the field as well as in our handling process, we want to make sure we've got the ability to take and rotate the material so that we're ensuring that we're not going to take an established resistance building up on it.

And the other part of that is using them in the different parts of, let's say, in our processing facility, our handling facility. We're

NEAL R. GROSS

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

going to use those in different points of contact, some in our packing line, some in our storage, some on the pre-dump, the post-dump, the dry packing line.

So there's going to be different points of contact where pathogen control is going to be of concern. And so having different compounds so that we're not relying consistently on a single material is important to us to make sure that we don't get into a resistance management scenario, to where we have resistance beginning to establish itself.

So it's really looking to be more in a preventative approach. If we ever get to where we're truly having to try to deal with something that's developing a resistance, organically, I think it's going to be too late if we allow ourselves to get to that point.

And that's, I think, the thing that we're trying to avoid, is to not get there.

MR. MORTENSEN: Okay, because we spent some time doing some background work to identify

NEAL R. GROSS

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

cases where resistant organisms had been identified and tied to certain sanitizing practices and weren't able to identify any.

I'm not arguing that a preventative approach isn't why, but I was just curious to know if you in practice knew of cases where organisms had developed resistance to a suite of practices, but it sounds like that's not the case.

MR. AUSTIN: To my knowledge, I'm not aware of that. And I can check within our industry and see if there is anything that we're aware of, and I'd be happy to take and share that with the Crop Subcommittee.

MR. MORTENSEN: That would be great.
Thank you, Harold.

MR. AUSTIN: Thank you.

CHAIR BEHAR: Okay. Todd, did you have a question, or is your hand just still up?

MR. CHAPMAN: From my last one, just still up from my last one.

CHAIR BEHAR: Okay. Any other questions out there? Michelle, any other people?

NEAL R. GROSS

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

Last call for Jennifer Wasieleski, Christy Kerbs, Steven Sprinkel, Linda Coleman, and Dick Atlee.

MS. ARSENAULT: Nope. I haven't seen any of the folks on the line, I don't think.

CHAIR BEHAR: Okay. No? Well, I'd say that was -- I know we're getting done just a little bit early, but plenty of good questions and I appreciate everyone, the NOSB members, the commenters, and all those people who are just lurking and listening.

So for those of you who will see us in person in Pittsburgh next week, looking forward to seeing you then. And other than that, I guess we will say that this meeting is adjourned.

MS. ARSENAULT: Great. Thank you, everyone. Thank you, Harriet.

CHAIR BEHAR: You're welcome. Bye-bye.

(Whereupon, the above-entitled matter went off the record at 3:28 p.m.)

NEAL R. GROSS

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

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

(202) 234-4433

www.nealrgross.com

UNITED STATES DEPARTMENT OF AGRICULTURE

+ + + + +

NATIONAL ORGANIC STANDARDS BOARD

+ + + + +

FALL 2019 MEETING

+ + + + +

WEDNESDAY
OCTOBER 23, 2019

+ + + + +

The Board met in the Philadelphia Ballroom at the Doubletree Hotel & Suites Pittsburgh City Center, One Bigelow Square, Pittsburgh, Pennsylvania at 8:30 a.m., Harriet Behar, Chair, presiding.

PRESENT

- HARRIET BEHAR, Chair
- STEVE ELA, Vice Chair
- SCOTT RICE, Secretary
- SUE BAIRD
- ASA BRADMAN
- JESSE BUIE
- TOM CHAPMAN
- LISA de LIMA
- RICK GREENWOOD
- DAVE MORTENSEN
- EMILY OAKLEY
- DAN SEITZ
- ASHLEY SWAFFAR

NEAL R. GROSS

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

STAFF PRESENT

MICHELLE ARSENAULT, NOSB Advisory Board
 Specialist, National Organic Program
 PAUL LEWIS, Ph.D., Director, Standards Division,
 National Organic Program
 DEVON PATTILLO, Materials Specialist,
 National Organic Program
 JENNIFER TUCKER, Ph.D., Deputy Administrator,
 National Organic Program

MARINE MATERIALS PANEL

CHRIS GRIGSBY, Maine Organic Farmers and
 Gardeners Association
 NICHOLE PRICE, Ph.D., Bigelow Laboratory for
 Ocean Sciences
 ALLISON SCHMIDT, Ph.D., Dalhousie University
 RAUL UGARTE, Ph.D., Acadian Seaplants

PUBLIC COMMENTERS

CHRISTIE BADGER, NOC
 JEN BERKEBILE, Pennsylvania Certified Organic
 ROLAND CARGILL, Fair Products Inc.
 BILLY CARTER, Carter Farms
 DAVE CHAPMAN, Real Organic Project;
 Long Wind Farm
 WILLIAM COLLINS, North Carolina State University
 MEGAN DeBATES, Organic Trade Association
 NICOLE DEHNE, Vermont Organic Farmers LLC
 JACKIE DeMINTER, MOSA
 JAKE DUNEVANT, JTI Tobacco International
 LOREN FISHER, North Carolina State University
 DAVID GOULD, FoodChain ID
 JAYDEE HANSON, Center for Food Safety
 TOM HARDING, Lehigh Valley Organic Growers Inc.
 KIKI HUBBARD, Organic Seed Alliance
 STANLEY HUGHES, Pine Knot Farms
 MARK KASTEL, Organic Eye
 PHIL LaROCCA, CCOF; LaRocca Vineyards
 ROLAND McREYNOLDS, Carolina Farm Stewardship
 Association
 KATE MENDENHALL, Organic Farmers Association
 JOHANNA MIRENDA, Organic Trade Association
 PETER NELL, CCOF

NEAL R. GROSS

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

KELLY PEPPER, Texas Organic Cotton Marketing
Cooperative
CINDY PHILLIPS, Hemp Analytics
CHRIS PIERCE, Heritage Poultry Management
Services Inc.
ANNE ROSS, The Cornucopia Institute
ALICE RUNDE, National Organic Coalition
GEORGE SEAVER, Ocean Organics Corp.
TERRY SHISTAR, Beyond Pesticides
AIMEE SIMPSON, PCC Community Markets
KYLA SMITH, Pennsylvania Certified Organic
FAYLENE WHITAKER, Whitaker Farms
GWENDOLYN WYARD, Organic Trade Association
JAMES YODER
ABBY YOUNGBLOOD, National Organic Coalition

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/Intros/Secretary's Report	5
NOSB Report	10
USDA and Agricultural Marketing Service, National Organic Program Update	24
Marine Materials Panel	102
Public Comments	196
Adjourn	452

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

8:31 a.m.

DR. TUCKER: I am now officially opening the Fall 2019 National Organic Standards Board Meeting.

My name is Jennifer Tucker. I'm the Deputy Administrator of the National Organic Program, part of USDA's Agricultural Marketing Service or AMS.

I will serve as USDA's designated federal officer for the meeting.

First, thank you all for being here and for making the trip to Pittsburgh. I'm going to start by introducing the USDA team.

So first, next to me is Dr. Paul Lewis, our Standards Division Director. Paul's team has had a very, very productive year and will be sharing some of that work here today.

Also supporting the meeting is Devon Pattillo over here. Our Agricultural Marketing Specialist extraordinaire. He is an amazing policy analyst.

NEAL R. GROSS

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

There are a number of other USDA folks who are here to meet you today. Joining us for the first time is the new AMS Chief of Staff, Anna Osterlind.

Anna previously served in USDA's Office of the Secretary as a policy and congressional advisor.

Anna is terrific to work with and we are really, really happy that she could be here with us.

From NOP we also have David Glasgow. Where's David? Okay, great.

David joined us also at the spring meeting and a couple of previous ones as well. He is NOP's Associate Deputy Administrator and is a wonderful partner in running the Program.

We also have our latest addition to the NOP management team, Jon Veley. Jon, stand up.

Jon came to us from Customs and Border Protection where he did a lot of work in stakeholder management and training with respect to CBP's import system, the Automated Commercial

NEAL R. GROSS

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

Environment which we will talk about later today.

Jon grew up on a dairy farm in upstate New York and is doing a beautiful job bridging our world and CBP's world. Thank you, Jon.

And then next we have Robert Yang. Robert is our Assistant Director of Accreditation.

He's doing a great job driving many of our accreditation system changes as we implement continuous improvement projects and move to more risk-based oversight systems.

Robert's going to be available to meet with any certifiers and farmers in the audience over the next couple of days as well.

And as always, to close USDA introductions let's give a big round of applause for Michelle Arsenault, our Advisory Board Specialist.

(Applause)

DR. TUCKER: Michelle not only keeps our world spinning here, she has also earned a lot of praise from other AMS programs over the past year for helping other advisory boards across the

NEAL R. GROSS

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

agency get started and to run as smoothly as possible. So Michelle, thank you for all your work.

Now, I want to thank the National Organic Standards Board who devote themselves to the organic community every day and in a multitude of ways.

There are 13 members here. We have one vacancy from when Eric Schwartz left earlier this year for another position and A-dae had to miss the meeting for family reasons.

For reference, with 13 voting members here the number of decisive votes needed to send a recommendation to the Program is 9. So nine votes are needed to advance a recommendation to the Program.

Here is a quick overview of our three-day agenda.

This morning we'll hear an NOSB update, I'll provide an NOP update and then we'll have a marine materials panel at the request of the board.

The rest of the day will be dedicated

NEAL R. GROSS

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

to public comments.

Tomorrow we'll continue public comments and then turn to the subcommittees. This will continue into Friday.

Friday afternoon we'll wrap things up with board officer elections and recognitions, and remarks by our outgoing board members.

To close I'd like to give a special thank you to Harriet, the chair of the board and this meeting. Let's give her a round of applause in advance of a great meeting.

(Applause)

DR. TUCKER: And now Harriet, I turn it over to you.

CHAIR BEHAR: Thank you, Jenny. And welcome, everyone, to the 56th publicly attended National Organic Standards Board meeting in Pittsburgh, Pennsylvania where I saw peak fall colors as I flew over the beautiful rolling hills of farmland and forests of western Pennsylvania.

I would also like to thank the National Organic Program staff that we work directly with.

NEAL R. GROSS

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

Jenny, David, Paul, Devon and of course our fearless herder Michelle for the support and guidance they give to the work of this board.

And I'd like now for Scott to give the secretary's report.

MR. RICE: Thank you, Harriet. Madam Chair, the summary notes of the spring 2019 biannual meeting in Seattle have been distributed to the board members.

I ask now are there any corrections or comments on those notes. None noted.

CHAIR BEHAR: So then they have been approved by the board. Thank you, Scott.

I would like to thank all the members of this board for the dedication to the important work we do, their commitment to presenting viewpoints based upon the stakeholder seats that they hold as well as their thoughtful discussions in the almost weekly NOSB subcommittee meetings they participate in.

I want to especially thank the NOSB subcommittee chairs all of whom prepare

NEAL R. GROSS

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

subcommittee agendas, lead those meetings and shepherd proposals from a thought to a written reality.

I especially want to thank Asa, Steve, Sue, Emily, Scott and Rick. It's really been a pleasure working with you and even sometimes nudging you.

I would like each of the NOSB members to introduce themselves now starting with Steve to my left.

VICE CHAIR ELA: I'm Steve Ela, Ela Family Farms, Hotchkiss, Colorado. I sit in the farmer's seat.

MR. RICE: Scott Rice with the Washington State Department of Agriculture Organic Program. I sit in the certifier's seat.

MS. OAKLEY: Emily Oakley, Oaks, Oklahoma, Three Springs Farm. I sit in a farmer seat.

MR. BUIE: Jesse Buie, Ole Brook Organics. I sit in the organic producer seat.

MS. BAIRD: Sue Baird in Missouri. I

NEAL R. GROSS

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

represent special interests and I manage the Missouri Organic Association among other things.

MR. GREENWOOD: Rick Greenwood. I sit in the environmental seat from UCLA and also am a certified organic avocado grower.

CHAIR BEHAR: Ashley?

MS. SWAFFAR: Ashley Swaffar. I sit in a producer seat. I have a small mixed vegetable farm in Arkansas and I work for a pastured organic egg producer. And this is my 10th and final meeting.

MR. CHAPMAN: Tom Chapman. I work for Clif Bar & Company and I'm from Emeryville, California.

MS. DE LIMA: Lisa de Lima. I'm in the retailer seat. I work for Mom's Organic Market based out of Maryland.

DR. SEITZ: Dan Seitz. I'm in a public member seat. I work for the Council on Naturopathic Medical Education and I live in Great Barrington, Massachusetts.

MR. MORTENSEN: Good morning, I'm Dave

Mortensen and I sit in the scientist seat. I'm the professor and chair of the Agriculture, Nutrition and Food Systems Department at the University of New Hampshire, Durham, New Hampshire.

MR. BRADMAN: Asa Bradman. I'm at UC Berkeley and I sit in the environment and conservation resources seat.

CHAIR BEHAR: And I am Harriet Behar. I sit in an environmentalist seat on the board and my organic roots go deep.

My farm has been certified organic since 1989, growing vegetables, bedding plants, medicinal and culinary herbs, small grains and I have a small commercial operation of laying hens and honeybees as a few people in the audience who buy the eggs from our chickens.

I've been an organic inspector since 1992 and an organic advocate before that. For the past two decades I've been an organic educator with the Midwest Organic and Sustainable Education Service, the International Organic Inspectors Association and currently I work with the

NEAL R. GROSS

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

University of Wisconsin in Madison.

In 1989 I helped start Organic Valley, the largest organic farmer cooperative in the United States, and I was a grower member of that cooperative for 30 years.

I serve on boards and I'm active in numerous local and national environmental organizations, and I gain great satisfaction from seeing the biodiversity of plants, animals, fish, birds, reptiles, insects and more increase on my 216 acres as my husband Aaron Brin -- hi, Aaron -- and I control invasive species, reintroduce native ecosystems and improve the spring-fed streams that have natural reproduction of an endemic brook trout.

We really enjoy creating habitat for those endangered and at-risk birds, plants and animals.

On my own farm and with the hundreds of organic farmers I interact with annually both as an inspector and educator I see the many benefits of organic agriculture it has on local, regional

NEAL R. GROSS

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

and global ecosystems, the economic security it provides to individual families and larger rural communities.

I also visit with numerous organic handlers from seed producers, input suppliers as well as all types of human and livestock food processing.

And they provide the needed tools and markets that keep farmers in business as well as choosing those organic ingredients and processes that lessen the use of toxic materials in their facilities and lessen those negative impacts these unneeded materials have in our lives.

While there are many different viewpoints and needs of the various stakeholders which results in lively conversations within the NOSB and with all of you we all share the same desire to protect the value and meaning of the organic label in the marketplace.

Participating in organic certification is a conscious and voluntary act.

I understand the National Organic

NEAL R. GROSS

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

Program works within the constraints of the larger U.S. government political processes and slow is the work of rulemaking.

But I do see organics at a crossroads where many issues need immediate attention and solutions.

The NOSB does their work with their recommendations based on extensive public input illustrating the need and support for both the work on an issue as well as that final recommendation.

Too many of our recommendations are in limbo and as time passes the need for those recommendations to be implemented becomes more and more urgent.

Examples are numerous. A recommendation to protect native ecosystems from destruction and then immediate organic certification has not been implemented.

How many of those thousands of acres in the newly burned Amazon will be approved for organic crop production which would have been prevented by that recommendation?

NEAL R. GROSS

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

The ongoing problems of fraudulent organic grain both domestic and imported continues to bring great pain to organic grain producers even though I know the NOP is working on that problem.

The long delayed implementation of the origin of livestock recommendation has resulted in great financial stress for those dairy operations that are doing the right thing and currently meet that rule.

We are looking forward to a speedy resolution to that issue.

The lack of consistent and strict implementation of the pasture regulation ignores the thought that the organic rule is scale neutral.

Instead it tends to support and encourage large-scale dairy operations to the detriment of the small and mid-size operation that actually pasture their animals in a significant way.

The NOP accreditation program is not as robust as it needs to be in bringing consistency and trust to certification.

NEAL R. GROSS

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

With the NOP recognizing that there are many organic cows not meeting the pasture rule and that there have been use of herbicides under landscape cloth on organic land.

These two issues were not caught during the certifier audits.

There are many issues with hydroponic operations, but the NOP has not allowed the NOSB to work on this issue.

Our vote in Jacksonville did not have the required two-thirds vote to be considered decisive, illustrating there is still work to be done to truly address this issue.

At this meeting there were tens of thousands of public comments stating that hydroponic operations should not carry the organic seal.

This issue, even though the NOP wishes it so, is not going away and it will keep coming up.

Lastly, how can sodium nitrate remain on the National List without going through the

NEAL R. GROSS

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

five-year sunset process as mandated by the Organic Food and Production Act.

The organic community will keep talking about these issues and more until they are solved.

We are passionate and tenacious and I think the USDA knows that.

We need the NOP to make official the definitions and list of specific technologies considered to be excluded methods under the organic rule.

While it is clear that gene editing is not allowed under the current rule, the NOSB has been having continuing dialogue about specific methods since 2016 and has unanimously voted to exclude the long list of methods including gene editing such as CRISPR at each meeting.

We have also found methods to not be excluded, illustrating that our dialogue is thoughtful and comprehensive.

More than 10,000 members of the public took the time to provide comments for this meeting against gene editing, and it is clear that the

NEAL R. GROSS

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

greater organic community is united in their opposition to the allowance of genetic engineering under the organic label.

One of my favorite musicians, Joni Mitchell, wrote a song with the refrain you don't know what you've got till it's gone.

We cannot let the promise of organic get lost in confusing and ineffective regulatory oversight.

We have all experienced and know the effect of human-caused climate change with weather events becoming more extreme and negatively affecting agricultural production of all types.

A recent study has determined that North America has lost 30 percent of the volume of its birds since 1970. Thirty percent.

Ecosystems of all types are in collapse with hundreds if not thousands of species in danger of extinction.

Our quality of life, our livelihoods and our very futures are at stake.

Organic agriculture provides concrete

NEAL R. GROSS

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

solutions to these many environmental crises.

The carbon we sequester in our sod crops and our cover crops can slow climate change, and as more farmers around the world adopt organic production methods can even work to heal the damage humans have caused.

Our reliance in organic on naturally based inputs instead of fossil fuel-based chemicals illustrates organic is a viable and productive way of farming.

Our dismissal that toxic materials and genetic engineering have no place on our land or in our food offers a practical and proven pathway to healthier practices for the production of food and fiber that support other forms of life rather than endangering them.

Organic agriculture can feed the world.

In fact, we must be the path of the agricultural future if we plan to have a future at all.

Nature can be resilient, and with understanding the cause of the problems, many times related to industrial agriculture and reliance on

NEAL R. GROSS

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

farm chemicals, organic agriculture can turn things around.

The steep decline of monarch butterflies over the past decade has raised awareness in North America that we need to do something.

And homeowners as well as large landowners have planted milkweeds, the prime forage for reproducing monarch caterpillars.

We've seen a promising increase in the number of monarchs this past year. I brought monarch butterflies for each of you to take home.

You can display them here on your computer, in your hair, on your clothes. Let's see a room full of monarch butterflies.

This is a hopeful symbol that organic provides so many answers that result in a resilient and healthy future for ourselves and our planet.

We must keep improving the implementation and meaning of our organic regulations.

We cannot take shortcuts. We cannot

NEAL R. GROSS

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

ignore the difficult issues. We cannot let those that are powerful overtake the organic label for their own economic gain.

The NOP must seek out, listen and learn from those who are doing the right thing on their farms and in their handling operations.

I understood it is difficult to take a complex system like organics and put it into a regulation that has no loopholes and mandates certifiers and operators to be consistently good to excellent in their regulatory implementation.

We all have to be committed to the path of organic integrity and continue our work, however difficult, to do what needs to be done.

I have no doubt the public will keep the pressure on the NOP and the NOSB and in return the will of the organic community will be heard and hopefully acted upon in a timely way. Thank you.

(Applause)

DR. TUCKER: And I turn this over now to Jennifer Tucker of the NOP.

NEAL R. GROSS

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

DR. TUCKER: Okay. Good morning again. Good to see you all here in Pittsburgh.

I have an update presentation from the National Organic Program.

This one is -- sort of settle in. It's going to take a bit because we have a lot to cover.

There's been a lot of action over the last several months so let's get started.

First we'll test the clicker. And there we go.

So I like to start by acknowledging all of the certified farms and businesses in the audience.

So if you are a certified organic farm or business stand up and wave so we can see who you are. Let's give them all a hand.

(Applause)

DR. TUCKER: Thank you very much for being here. There are almost 1,600 certified organic farms and businesses in Pennsylvania. And you can learn all about them in the Organic Integrity Database.

NEAL R. GROSS

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

And so here's an overview of our agenda this morning. There's a lot happening and I want to let you all know how we are investing our time and talent.

The organic market continues to grow and continues to become more complex. The additional resources given to the Program over the last couple of years are being directed to making sure that where organic grows we can go.

This means new rules, expanded partnerships and more people. So we're going to start by going over our goals and priorities.

Okay. So here are our overarching four goals. And these remain the same. We launched these about a year ago and they are working well for us in organizing our priorities and guiding our projects.

So strong organic control systems, farm to market traceability, robust enforcement, and we're continuing to support the standards and collaborate with the community.

Let's look at our specific goals and

NEAL R. GROSS

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

priorities for FY 2020. So we just started a new fiscal year, so we've just begun FY 2020.

And here are the key areas that we are focusing on.

In the area of rulemaking I will be talking about the Strengthening Organic Enforcement proposed rule later on in the presentation.

The origin of livestock public comment period is reopening on a way to a final rule.

And then we have National List rules that we continue to churn out.

Enforcement always continues to be a top priority. This include complaint reviews and investigations focusing on livestock compliance, grain fraud, imports and surveillance around the world.

Import certificates. We have given money to Customs and Border Protection to build an organic import certificate into existing import certificates. The system. We'll talk a bit more later in the presentation.

NEAL R. GROSS

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

Next we need to design data analysis and reporting tools.

International arrangements. We are continuing to oversee and negotiate equivalency arrangements and enforce our existing recognition agreements.

Federal partnerships. We've deepened a number of federal partnerships this year. We'll continue to do so.

Certifier and other partner training. This includes face to face training, new courses and our Organic Integrity Learning Center and other ways of engaging with different partners.

We're going to be launching our non-compliance library and certifier portal to facilitate more rapid communication and risk-based oversight with certifiers, and we're continuing to build our organization.

We've hired additional auditors, accreditation managers and enforcement specialists, and we'll continue to do so in the coming year.

NEAL R. GROSS

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

So, during my dry run of this presentation back at home the team encouraged me to actually breathe during these transition slides, to take a break and highlight that we're moving to a next topic.

So let's all do that together. We're going to breathe twice together. In and out. In and out.

Okay, so that's nice. Let's keep going. Okay.

Let's focus on enforcement here. There are three primary emphasis points in our enforcement efforts, process and then also in domain and focus.

Complaint investigations, market surveillance and coordination with federal enforcement agencies. Those are three very different approaches to enforcement.

We've really been able to broaden that toolkit over the last year.

In terms of the sectors that we're focusing on, we're focusing on imports, livestock

NEAL R. GROSS

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

compliance and grain and oilseed handling. So I'm going to talk about each of those in turn here.

First, let's talk about imports. The tools that help us in import oversight also help us in domestic oversight. So I'm going to walk through these areas.

Last meeting I told you about some farm-level yield analysis studies that we were just starting.

And those have ended up being a very, very valuable tool for surveilling but also taking enforcement action.

As some of you may know we suspended the Turkey office of Control Union this spring. So we suspended them because that office was unable to demonstrate its ability to remain in compliance.

And one of the ways we were able to gather the evidence to support a suspension was through this farm-level yield analysis, looking at farm-level data.

We looked at OSPs from across the region, looked at certificates, looked at in/out

NEAL R. GROSS

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

balances, looked at mass balances, really looked at what the farm could actually generate.

And what we found in some areas was the Lake Wobegon effect where everybody was above average.

And so that supported some very robust enforcement actions. And I'll show some of the outcomes in a few minutes here.

We also are using more extensive trade data trend analysis. We've hired an agriculture economist who is very good at using public data to help us know where to go next as organic grows around the world.

That allows to be in new places before the market really takes hold there. And so there was some news coverage earlier this year about some investigations happening, for example, in South America country.

We were there long before the work became public there. And we will continue to do so.

So we don't always share where we're

NEAL R. GROSS

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

going next because there's a lot of power in that surveillance, but the trend data has been very useful informing that work.

We've also continued our country commodity studies where we learn a lot about the dynamics of a particular commodity in the trading environment in a particular country.

That's giving us new ways of interacting with governments and with on the ground foreign ag service employees who really understand the agricultural environment again helps with both enforcement and surveillance efforts.

And then finally, ship-specific surveillance. There are a lot of ships that come to the United States carrying organic product.

I want to stay on this topic for a little bit because often we'll get emails in from folks saying well, a shipment of beans is coming in and what are you going to do about it.

Or a shipment of grains is coming in and why aren't you going to stop it.

So there was a particular instance that

NEAL R. GROSS

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

happened earlier this year of a ship that came to the Carolinas. And there was a lot of interest in that ship because there were grains on that ship that had come from operations that were certified by Control Union Turkey.

And Control Union Turkey right around that time lost its certification. And so it came to us saying well, why aren't you stopping this ship because all of those operations, or a lot of those operations may have been, may have been certified by Control Union Turkey.

And so I wanted to comment that when a certifier loses its accreditation, and there have been a few of these either through surrenders or through suspensions the operations under those accreditations that are certified by that entity, they do maintain their certification.

They remain certified in good standing.

They must apply for a new certifier within 60 days.

But there's nothing in the regulations that stops certification when a certifier is suspended. Operations maintain certification

NEAL R. GROSS

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

until they are suspended or surrender.

So there's been a lot of activity since the Control Union Turkey suspension and all of those operations are either exiting the market, a lot of them are exiting the market, or they've applied for other certifications.

But that's where our effort is best placed is overseeing what's happening on the ground in those countries to take enforcement actions.

By the time the ship gets here that's not where our priority can be. That's where the certifiers have done testing already of ships that come to the United States.

There's been a directive through the Black Sea region. The oversight of the supply chains themselves is strong.

We are focusing on the ground to see what's happening and that's where our greatest enforcement tradeoff has been.

Okay, let's move onto livestock compliance which has been a continuing and even increasing focus for us.

NEAL R. GROSS

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

So last year we started the dairy compliance program and we are heightening that, increasing that this year and next.

So unannounced visits have continued across the United States. We use risk-based criteria to select those visits, and risk-based factors are things like size, complexity, market impact, and a history of either past complaints or non-compliance issues.

And so those unannounced visits are continuing.

We are also doing investigations. Those investigations can actually be with businesses outside the announced visits as well.

So that's a bit of an overlapping Venn diagram, but those investigations have led to both certifier and operation adverse actions.

We have recently released a course in the Organic Integrity Learning Center, a training on dairy compliance.

A number of folks have already completed that. They're reporting that it's

NEAL R. GROSS

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

taking between two and three hours to complete that training.

So it is a comprehensive view of the regulatory framework around livestock focusing on dairy.

There are more than 1,500 people that have been registered for that course.

The origin of livestock rule, part of rulemaking. The comment period has been reopened. That is a step to be able to move to a final rule. Comment period closes December 2.

Now let's turn to grain and oilseed fraud which is a continuing focus that has also increased over the last year.

Grain fraud is a multimillion dollar problem and it likely affects everyone in this room.

So organic grains and feed stocks have very high price premiums, making it a natural candidate for fraud.

They are handled as bulk commodities making them hard to trace. They've got long shelf lives. They store in open containers and they

NEAL R. GROSS

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

often have long supply chains.

And so we have both import challenges and domestic challenges here.

So import challenges are in the form of high volumes from the Black Sea, Argentina and India.

And then domestic challenges, we are seeing processors that are representing non-organic product as organic.

And so our number of investigations and surveillance in this area are increasing, and I would say to everyone in the room buyer beware.

Be aware of your supply chains, be protecting your supply chains because ultimately that impacts all of us.

Now there are many, many hands beyond NOP that are supporting us in all of this work.

And so USDA Office of Inspector General has become a central actor in our work. We work with Foreign Agriculture Service both in accessing their data, public data, and also boots on the ground. They have desk officers in countries

NEAL R. GROSS

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

around the world and we are connecting with them more frequently for enforcement and surveillance actions.

We work closely with foreign governments under equivalency and recognition arrangements.

And we work with other federal agencies such as Customs and Border Protection, Department of Justice through the Inspector General's Office, and FTC, Federal Trade Commission.

Certifiers are a vital partner for us.

And while we oversee them, we also work closely with them as partners to oversee the market.

California State Organic Program is a very important partner in enforcement, as is the public.

We get hundreds of complaints per year.

Many of them come from the public. Many come from competitors who are worried about what their competition is doing.

The public is a very important voice in the enforcement process.

NEAL R. GROSS

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

We have been moving to more risk-based control system oversight mechanisms.

So we used to focus on this idea of annual certification inspections and unannounced visits and random checks.

For a long time the public wasn't really aware that every organic farm around the world is inspected every year.

I think that we have corrected that. People have a better understanding of how organic farms are overseen.

In this new world that's simply not enough. We have longer, complex supply chains where you have farms and aggregators and processors and brokers and shippers and wholesalers and retailers all the way to the consumer.

And so that really requires a new approach. Certifier information sharing has improved significantly over the years.

Certifiers are calling each other to check on supply chains, to check data, make sure operations that they're certifying are in good

NEAL R. GROSS

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

standing and haven't been suspended or in trouble with another certifier.

That information sharing is speeding fraud detection and it is moving along investigations faster.

It also helps us in surveillance. New surveillance tools like supply chain monitoring, mass balance checks and targeted visits in high-risk areas and activities.

So let's look at some outcomes over the last few months.

More than 275 operations have lost certification in the Black Sea region. That's a result of a lot of work over the last couple of years.

But the count of operations that have lost certification is now above 275.

There have been some high-profile criminal and appeals cases that are acting as deterrents.

We have a number of suspensions and settlement agreements that ensure sound systems.

NEAL R. GROSS

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

And certifiers are actively improving around the world. More denials of certification and more adverse actions.

So in fact our appeals count this year shot up. It's interesting to see how different parts of the system impact each other.

And so we had the highest incoming appeals count ever this year. And I think it's because certifiers have been issuing more proposed adverse actions, more proposed suspensions, more proposed revocations.

The compliance and enforcement team completed 412 investigations this year and resolved more than 250 inquiries.

A lot of what comes into compliance and enforcement isn't actually a complaint, it's an inquiry. And so we separate those out now as part of our risk-based work which means that this past year our C&E team had over 600 customers that they resolved cases with.

So let's take a look at those complaints. This is a graph of the complaints

NEAL R. GROSS

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

completed by fiscal year.

And so the number of complaints that have been completed by fiscal year.

And you can see in the last couple of years there's been particularly a breakout between the complaints and the inquiries.

But the number continues to go up. So the team completed almost 700 of these incoming complaints -- almost 700 of these complaints in total this year. So the number keeps coming up.

We've been lucky to get additional resources to support us in that work and it means that cases are resolved more quickly and using a risk-based triaging approach.

So, I want to talk a bit about continuous improvement when it comes to oversight and enforcement.

And so this is a graphic that we are using to help us sort of map out initiatives and projects in enforcement efforts.

On the left side of the chart you have scale. And so the bottom is operation level action

NEAL R. GROSS

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

and then at the top is broad-based industry level action.

On the bottom you have two categories, capability development which is really getting us all smarter on how to oversee and enforce the market, and then you have actual enforcement. And so taking an adverse action against an operation.

Those are two very different activities with different expectations of evidence.

So let's talk about the evidence side, the right side. At the certifier level we issue certifier non-compliances, settlement agreements, suspensions. At the operation level there are also non-compliances, settlements, suspensions and revocations.

We also issue civil penalties and there have been some cases that have involved prison time.

This bottom right quadrant requires a lot of evidence. It takes a lot of evidence to get somebody out of the game.

And there's nothing more discouraging for the team to work on a case for a long time and

NEAL R. GROSS

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

just not have the smoking gun, just not have it.

And so that has led to a positive feedback loop on the information side. And so as we learn we issue tools, training programs, webinars, enforcement updates, and then regional directives that help us gather more information.

So by training certifiers on how to do import oversight better they are able to help us find those smoking guns.

The regional directives that we did in the Black Sea region had a very large impact in the fact that there are now more than 275 operations that are out of the game.

It's also increased the number of denials of certification as operations seek new certifiers after the Control Union Turkey exit.

And so having better capability among certifiers worldwide leads to more evidence, more smoking guns that allows for more enforcement action. So that becomes sort of a virtuous circle over time.

In the upper right you'll see there's

NEAL R. GROSS

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

no color. Country commodity activities.

We often get asked well, why don't you just -- why don't you just stop grains coming in from the Black Sea region. And it's a fair question, why don't you just stop that.

The reality is that in the Organic Food and Production Act and USDA regulations Congress has not given that type of authority. And so there is no authority within the act to stop incoming imports from a region or for a specific commodity. Everything is at the operation level.

And so that's where I think this chart is helpful in laying out what we control and how we continuously improve, and what some of the open areas may be.

Okay, now we all get to breathe again.

So we're going to just take a couple of breaths and then we're going to talk about the strengthening enforcement proposed rule. So, in. Okay.

Okay, we're going to now talk about the strengthening organic enforcement proposed rule.

And so a big theme throughout this

NEAL R. GROSS

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

presentation is the increased complexity of supply chains. As organic has grown so has that complexity.

And so we have worked on a proposed rule. It has been shaped by the Farm Bill. It has been shaped by program experience over a long time, shaped by stakeholder feedback and shaped by a number of National Organic Standards Board recommendations.

This proposed rule will be a game-changer. So for those who don't think we've been doing enough rulemaking this will cover an awful lot of ground. It's going to fundamentally transform the regulations in the area of compliance and oversight to respond to the changes in the market over the last several years.

Let's take a look at what is in this rule. So there are two kind of layers here that I'm going to run through.

Here are the three big buckets of provisions in the rule.

First, there will be fewer exemptions.

NEAL R. GROSS

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

We will be increasing the number of handler certifications. So for the loophole where uncertified handlers don't need to be certified if they're not directly handling product, that loophole will be closed. They will all need to be certified. This is usually where somebody claps.

(Applause)

DR. TUCKER: Thank you. Second, import certificates. We will be implementing electronic certificates for all imports.

This is an interesting project in that we need to co-evolve the rule. So the proposed rule requiring this import certificate, but also evolve the technology.

And so we are marrying rulemaking with technology development in an agile, iterative way.

So as we are working on the proposed rule for electronic certificates we're also working with CBP to actually build the import certificate.

So once all of this gets finalized we'll have tooling available and ready to go to start

NEAL R. GROSS

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

the process faster. So that's been an interesting kind of co-evolving project.

And then the third bucket is a number of provisions related to enhanced oversight which means strengthening accreditation and certification oversight.

Now that third box I'm going to go into a little bit more detail here on the next slide.

These areas are loosely grouped into three categories. Robust inspections. Unannounced inspections are not actually in the regulation. So certifiers do them and they follow the instruction on them, but they really need to be codified within the regulations themselves.

We will have requirements related to inspector training and qualifications. Trace back and mass balance audits will be required. Those are things we had really hoped certifiers were doing and needs to be codified in the regs.

Grower groups. Grower groups continue to be an area of risk in the international market.

When we're out doing our accreditation audits we

NEAL R. GROSS

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

see problems in this area. So we'll be implementing the board's recommendations in that area.

Second group is confirming organic status. We're looking at non-retail labeling, standardized organic certificates, data reporting and certifier information sharing.

And then finally, certifier oversight. We'll have a 90-day notification of any new satellite office.

We will codify our processes for equivalency reviews and we will make updates to the adverse action and appeals process.

So all of this is a preview to help you sort of plan out your thinking for commenting on the proposed rule.

So the proposed rule will be published we hope sometime in late 2019. Let's go to next steps. So late 2019.

The comment period will be about 60 days and all businesses that are affected are encouraged to submit comments. So here are some best

NEAL R. GROSS

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

practices for that.

Describe your concern and the impact.

So if there's part of the rule that you think needs comment describe exactly what the concern is and what the impact of that concern would be.

It's always helpful to have you provide alternative solutions. So if there's a better way of doing it that will have the same impact or will be more sound and sensible we want to hear about it.

And then it's also very helpful to have you respond to questions that are in the rule. The rule will contain a number of questions and so the more responses we get to those the better the final rule will be.

All comments will be public and viewable at regulations.gov so look for an Organic Insider announcing that rule later this year.

I mentioned the sort of co-evolution of the technology. So I just want to very briefly touch on this.

Organic is entering a world that

NEAL R. GROSS

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

already is very well established with import oversight.

Customs and Border Protection has a responsibility for all imports. They've been doing this for a long, long time.

They have a system already, the Automated Commercial Environment.

And so our job is really to figure out how to layer the organic world into that preexisting sort of ecosystem of oversight.

So we need to figure out how to get the data and the approvals into the right system. So that will impact operations, will impact certifiers.

We need to learn and use existing import filing processes. That data import process then leads to the import certificate itself which will be handled by ACE, the commercial environment.

That work is happening right now. They are building as we speak.

Then we need to figure out how to get the data out of it. So AMS already has some good

NEAL R. GROSS

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

tools for data reporting out of ACE. ACE itself has some reporting mechanisms.

So how do we analyze and visualize that data so that we can then take action. So we have reporting and trends, how will it inform investigations and how will it inform our risk-based surveillance.

I think we're going to have a much better sense of what's actually coming into the country once we have all of this data.

And it could profoundly change how we do surveillance and where we choose to focus as a community.

Okay, breathing again. Okay. Next we are moving to NOP, organization update.

So, we are growing. With additional resources have come the ability to expand the organization.

So I'd like to give a bit of a glance at what the organization is looking like, or what the organization is that we're evolving towards here.

NEAL R. GROSS

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

And so here's a current very sort of high-level org chart here. And so you have David and me at the Program level.

And then we have split accreditation and international activities. So the artist formerly known as AIA has been split.

We now have a group for international activities because overseeing equivalency arrangements and recognition arrangements, it really is fundamentally different from accreditation and there's just too much work for one division.

So international activities is being headed by Cheri Courtney.

And then we have a new group specifically focused on this trade systems work.

So you already met John this morning. John's in charge of that work.

Paul continues to lead standards. And then in the bottom middle we have Robert Yang who I introduced this morning. Robert is the Assistant Director of Accreditation.

NEAL R. GROSS

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

That group has further subdivided into a pool of accreditation managers and a pool of dedicated auditors. And so we will recruit for the accreditation director position. In the meantime Robert's doing a great job with that.

And then Betsy continues to lead our compliance and enforcement group which also continues to grow. So we'll continue to get more help in for Betsy.

We are hiring. So we sent out an Organic Insider recently saying that we were going to be putting some announcements out there in the world.

There will be multiple positions that will come out this fall including a National List manager, auditors, accreditation managers and more compliance and enforcement specialists.

On the screen you see Tanesha who is one of our new livestock specialists and Gustavo who is our agricultural economic specialist. He's fabulous at mining ACE for all the data it's got.

And so if you're interested those jobs

NEAL R. GROSS

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

will be announced in USAJobs. They aren't open for very long and so spread the word that people should set up searches. And often they have funky job titles, like agricultural marketing specialist, or compliance officer.

So for folks that you think might be interested in federal public service please spread the word.

So, as we grow I wanted to spend a bit of time talking about how we avoid conflict of interest.

We committed to providing this update in response to our 2018 ANSI peer review. The ANSI team when they were onsite noted that we didn't explicitly talk about conflict of interest much in our quality manual.

That was interesting because this happened when Ruihong Gao was our Acting Deputy Administrator before I got the job.

And she reacted to that ANSI feedback pretty strongly. She said oh my goodness, do you have any idea how many rules and regulations we

NEAL R. GROSS

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

have to follow here as federal employees.

There are rules for everything we do to avoid conflicts of interest.

The auditor's response was taken a little bit aback and he said well, actually, no, we have no idea what those rules are.

And so we talked about all the rules that we need to follow for conflict of interest.

And ANSI said, you know, we're going to bet that your stakeholders don't know about any of this.

And so we're going to recommend that you share all of those things that you take for granted in the Program.

So my sharing these things today with you is a direct outcome of that ANSI peer review.

And so it starts with recruiting and hiring. I just said we're going to be hiring to bring folks in.

That process and one of the reasons it takes so long to get an announcement out the door is that Office of Personnel Management rules drive

NEAL R. GROSS

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

the entire recruiting process. There are many layers of rules and regulations that relate to that.

And in fact, human resources screens all candidates before NOP even receives a list of qualified people. So we only receive a list of candidates once they have been screened and often we don't even know who applied that didn't make that, what's called a certificate.

Once they're in the door all federal employees take an oath of office and commit to avoiding conflicts of interest.

Employees are all based by ethics rules and codes of conduct.

Then when it comes to certifier and enforcement case assignments no NOP staff member is assigned to cases or certifiers that they used to work with.

The ISO standard for this is one accreditation audit cycle. So people can't oversee an organization for at least one audit cycle.

In practice for us -- it's a three-year

NEAL R. GROSS

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

minimum, but in practice it lasts a lot longer. We have folks who have worked with us for years who have never worked with a certifier or a business they were previously associated with.

I do want to comment that sometimes we get feedback of oh gosh, are you sure you should be hiring people from certifiers or from operations.

And for me the answer is yes. These are folks who have an intimate knowledge of what happens in the field and they have purposely selected into public service because they want to oversee the system and make it better.

They are incredibly devoted and dedicated to the organic community and they walk in knowing what to look for on the ground.

They've chosen federal service. They have chosen to enforce the regulations. And we are very proud to have them with us.

Let's now move onto appeals. Appeals of NOP-issued adverse action. So when we issue a proposed suspension or revocation.

NEAL R. GROSS

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

Those appeals are always decided by people outside the Program.

In contracting the number of rules and regulations associated with contracting is stunning.

So if you are ever bored one Saturday night go read the Federal Acquisition Regulations.

We are bound to those regulations for everything we do and they prohibit conflict of interest.

All contract staff reviews and signs non-disclosures to ensure confidentiality and conflict of interest declarations.

Finally, we get questions about certifiers themselves. Well gosh, certifiers get paid by the businesses that they oversee. Isn't that an inherent conflict of interest.

And it's a fair question. And so let's talk about how we manage that conflict of interest.

NOP reviews certifier adverse action processes to make sure that certifiers are appropriately overseeing and taking adverse actions against operations when necessary.

NEAL R. GROSS

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

We have issued non-compliances to certifiers when needed. So one risk area is if a certifier hasn't issued any notices of proposed suspensions or proposed revocations we look at that during their audit.

We also check for and have issued non-compliances when there is a perceived or actual conflict of interest across certifier staff and leaders.

I would note that one way we know the system works is that 415 operations have been suspended or revoked since the beginning of this year.

So the system established by Congress is working because certifiers essentially fired their clients more than 400 times over the last 10 months. That's more than one a day.

Okay. Last section. We are almost done. Final breathing opportunity before we complete the last inning. In and out.

Let's start with National List updates. We recently published a sunset 2019 -- sunset

NEAL R. GROSS

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

renewal. So that's available in a Federal Register located near you.

National List proposed rule responding to October 2018 NOSB recommendations opened for public comment and that public comment period is open until December 17. So if you are a business that could be impacted by those recommendations the public comment process is very important.

National List final rule in response to April 2018 NOSB recommendations was published today. So that's actually 18 months which was our new target, 18 months between the time we get recommendations and the time of a final rule publication. So congratulations Paul and the standards team.

We also recently issued a biodegradable mulch study. I want to pause over this for a second.

This study reviews policy and scientific issues associated with bio-based mulch film in organic agriculture.

It's designed to assist the board in

NEAL R. GROSS

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

its continuing work on this agenda item.

I wanted to highlight it here to encourage the board to continue its work on this item.

Right now we have a National List item that no one can functionally use. When I'm out there talking with farmers and I ask them what is really important to you, what do you want us to know this topic comes up constantly.

This is an area that people have a lot of interest in. Many of these folks as Harriet talked about earlier are very interested in the environment and this is an awful lot of plastic going into landfills. So I encourage the board to continue its work on this topic.

A brief plug for the Organic Integrity Learning Center. I mentioned earlier we now have more than 1,500 users with accounts.

And with the exception of dairy which just launched in the last couple of weeks every lesson in the learning center has had more than 200 completions where people have completed the

NEAL R. GROSS

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

lesson and completed the assessment at the end of the lesson. And so 200 unique completions of every lesson.

A coming upgrade will be to introduce course certificates. We've gotten a good amount of feedback from inspectors saying I need a piece of paper. I finished the course and this was my grade.

Blackboard is the system this is built on and it was more around the courses for university environments where the university actually issues the transcript.

But when we upgrade Blackboard we'll be able to provide that piece of paper for a course which our inspectors have said will be very helpful.

Upcoming courses will be an advanced investigations course to increase certifier consistency in conducting investigations, a fraud prevention course we're doing jointly with OTA, a certification administration course to help certifiers improve their systems.

We're doing a course with OMRI on

NEAL R. GROSS

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

material reviews and we are wrapping up a tools for traceability course on mass balance and traceback audits.

So you can sign up. Any member of the public can sign up. All courses are free. You can send an email to our team and they will set you up with an account.

Okay, let's talk about gene editing.

A lot of public comments for this NOSB focused on gene editing in organic agriculture.

And so we want to reiterate that the excluded methods definition of the organic regulations is pretty broad. It does not allow for gene editing. It is understood broadly to be prohibited.

USDA does encourage robust dialogue on the role of new technologies and innovations. In fact, that dialogue is happening at this meeting with a number of items that the board is discussing, particularly with respect to livestock vaccines.

So let's just continue the conversation. Changing the definition of excluded

NEAL R. GROSS

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

methods is not currently on the USDA regulatory agenda.

And then finally containers. So since the last meeting USDA issued a memo, it was issued in June 2019 that upheld existing USDA regulations for organic container systems.

That memo was successful in increasing consistency across certifiers where there had been some inconsistency and misinterpretation.

So certifiers evaluate land use history for compliance with the regulations, and just to make sure we say it prohibited substances are not allowed in organic production.

And so now I am going to turn it over to the board for any questions that you may have.

CHAIR BEHAR: Thank you, Jenny, that was very comprehensive and I'm glad to see all the things that you're doing, especially more staff.

I think that will really help. Thank you.

DR. TUCKER: Thank you.

CHAIR BEHAR: I see Emily.

MS. OAKLEY: Thank you, Jenny, and I

NEAL R. GROSS

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

appreciate the Programs issuing the memo that clarified the three-year transition regarding containers.

And I know that you're aware that there's still some confusion within the community as to whether or not that memo applies to every operation regardless of where or how they're growing.

And so I was wanting to ask the question is that memo intended for every single certified organic producer. Are there any exceptions that the NOP is allowing to the three-year transition?

DR. TUCKER: So the memo upheld the regulation. So I think if an operation has a question about compliance it needs to contact its certifier.

The regulations are clear about the use of prohibited substances on land. And so all container systems must meet regulatory requirements related to that prohibited substance use.

In the public-private partnership

NEAL R. GROSS

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

certifiers make a lot of decisions all the time where they're applying the regulations to site-specific conditions and that is a range of production environments, a range of different environments.

And then we monitor the certifiers to make sure that their decision-making is correct.

We believe that the memo resolved a lot of confusion out there. When we're talking to certifiers about -- and operations there were a lot of questions that were answered by the memo and they appear satisfied.

I would say that confusion and disagreement are different. And so we hear when folks come to us and they say they're confused it's actually that they disagree with a determination.

And so I'm very confused about this is one way of saying I disagree with this.

We hold that the memo was successful in eliminating inconsistency and actually at this point the greatest inconsistency we see is with certifiers that are choosing not to certify certain

NEAL R. GROSS

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

types of operations, so not developing the administrative capacity to certify those operations.

And so where there's inconsistency and confusion that's where it most likely lies.

CHAIR BEHAR: Emily, a follow-up?

MS. OAKLEY: Yes, can I have a follow-up to that?

So, I am confused and it's not because I disagree. I am genuinely unclear if that memo includes greenhouses, for example, or indoor facilities.

And we discussed this on the executive call at length, although it was a call that I think you weren't able to be on.

And at the time it was my understanding from the Program's response that yes, this memo was intended to cover every single type of operation, not just exclusive to containers, but also to greenhouses, or indoor facilities, or any other possible conceivable place where someone might grow food.

NEAL R. GROSS

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

So I know I brought that up again on another executive call and the second time I asked that the answer seemed a little less clear to me.

So I guess my question is, for example, if I were a greenhouse -- I know you don't like hypotheticals and I don't mean to do that, but this is where the confusion lies -- could I get certified organic, grow my crop, take out my crop from the greenhouse, transition out of organic and spray with prohibited substances for a couple of weeks, re-transition back into organic a month later, grow my crop and do the same thing every year.

DR. TUCKER: I would say that that's something that -- the regulations apply to everybody. You're talking about prohibited substances being used in an organic system and prohibited substances are not allowed in organic agriculture.

And so I would say that that operation needs to read the regulations and that certifier probably needs to talk to that operation.

And so I think again if an operation

NEAL R. GROSS

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

has questions about the practices that they can use and can't use they need to talk to their certifier.

We will continue to monitor certifiers for consistency. And we do that across the practice standards.

We're keeping an eye on how -- and materials for that matter. So how are certifiers interpreting and applying regulations.

When a certifier makes a bad call, if they allow something that's against the regulations they'll get a non-compliance and we'll have to correct that.

If we see broad disagreement like sometimes we do with materials. Paper pots is a good example.

When there is broad disagreement on a topic then we will either do a training, or a policy statement in order to get everybody in alignment which is what we did in this case.

So if we see the need for more consistency or that there is broad confusion then

NEAL R. GROSS

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

we will take some type of policy action. That would come out in the Organic Insider.

I would say for individual operators who are confused about their particular operation they should talk to their certifier.

CHAIR BEHAR: Ashley, and then Dave.

MS. SWAFFAR: So I just want to say thank you for some movement on origin of livestock, but I would like to know the Program's rationale maybe for why you did a proposed rule instead of a final rule on origin of livestock.

DR. TUCKER: Yes. So let me explain what happened because for those who aren't sort of embedded in the rulemaking process this can be a little confusing. So I appreciate the question.

There was a proposed rule for origin of livestock in 2015. What this public comment period did was simply reopen the public comment process for that rule.

So there has been no new proposed rule.

All we did was reopen the docket for the 2015 proposed rule.

NEAL R. GROSS

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

And the reason for doing that is that if you look at the evolution of organic over time it's grown a lot since 2015.

There's different structures within the dairy market. There is more operations. And so over four years there are a lot of operations, a lot of farmers who didn't maybe have an opportunity to comment on the 2015 rule because they weren't in business yet.

And so by reopening that public comment period we get to hear from anybody who entered the market who needs an opportunity to comment before moving to a final rule.

So reopening this public comment simply provides one more opportunity for people to have their voice be heard before moving to a final rule.

So the impact of a second public comment period is to help us move expeditiously to a final rule.

MS. SWAFFAR: And how long till we get a final rule?

DR. TUCKER: Rapidly. This is I said

NEAL R. GROSS

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

in our priorities that strengthening organic enforcement would come out later this year.

As soon as public comment closes for origin of livestock we will be moving ahead on that project.

MS. SWAFFAR: And I'm sure you're aware of all the appropriations bills and how origin of livestock is tied to that.

Do you feel that the department can move in that 180-day time period?

DR. TUCKER: You know, I don't speculate on standards and I don't speculate on clearance timelines. So I've learned my lesson on both of those items. So I would not want to speculate.

I can say that the administration has voiced support for this rule and would like to move it forward.

CHAIR BEHAR: Dave, and then Scott.

MR. MORTENSEN: Yes, I wanted to thank the NOP for the work that you're doing particularly on the international grain trade.

NEAL R. GROSS

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

I know two years ago or two and a half years ago there were a series of meetings where there was a great deal of discussion and some very significant steps have been taken.

So in light of the invested time by our stakeholders, the board and the NOP I thank you for that.

I'd like to just take a couple of minutes to state a reflection and then raise a question about the gene editing CRISPR bullet point that read something to the effect, a robust discussion about the technologies will continue or something like that. The third bullet.

I am getting older. I have worked at three universities and probably two-thirds of my work as a researcher was in farm fields.

In farm fields and the delta of Mississippi, the Piedmont of North Carolina, eastern Nebraska and western Iowa, central Pennsylvania, northern Virginia, now in New Hampshire.

And after all of that work and the work

NEAL R. GROSS

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

of so many other farmers and researchers and USDA agency folks that I've interacted with I have realized that we have a diversity of philosophies in the farming community.

And I think diversity in thought is a valued characteristic of our culture and society in agriculture.

And I think we should embrace it rather than move toward some common, shared set of practices or views where we all hold all things equal because it isn't that way out in the fields across the United States.

I've seen the genetically modified crop phenomena unfold during the course of my career.

In 1996 the first genetically modified soybean, glyphosate resistant, Roundup resistant soybean came online.

I spent the last 11 years of my life, probably one-third of my time fighting against widespread adoption of these crops after the USDA and the EPA promised that it would only unfold in soybean.

NEAL R. GROSS

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

Then within a year or two it was corn, and within a year or two it was alfalfa, and then the next year it was sugar beets, and yada yada yada.

Ninety-six percent of the soybean were genetically modified last summer.

All of these practices have exerted pressure on the organic community, both through the integrity of the seed that the farmers are producing for the consumers to eat, but also the unintended consequences sadly of the herbicides, that we have now doubled the amount of herbicides we've used on the backs of genetically modified soybean that further threatens organic farmers' ability to grow broad-leaf crops of any kinds, particularly in matrices, agroecological matrices where corn and soy are commonly produced.

It's clear from the many comments that we received that organic consumers and organic farmers do not want genetically modified practices as any part of their production system, end of story.

NEAL R. GROSS

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

And I don't think that we should be encouraging or suggesting that we need robust dialogue.

This point has come up every year actually while I've been on the board that we should open our minds, let's have some biotech folks from USDA come in and talk with the board about some of the new technologies that exist.

The biggest concern in addition to the many that we've received as board members to read prior to this meeting that I have is the slippery slope that I've observed over the 30 years I've been doing the work that I do.

First it's soybean. Then it's soybean and corn. Then it's soybean, corn and alfalfa. Oh, then we need more herbicides because of the crops we've transformed.

First we'll allow a little bit of hydroponic, and then oh my goodness, we can't deny hydroponic farmers that are doing organic hydroponic because they've invested in it. It's a slippery slope.

NEAL R. GROSS

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

If we allow continued discussion and then consideration of gene editing I think this is just one more example of where we get ourselves into trouble and compromise the policy-setting that we're charged to do.

Two months ago I was sitting in a room something like this in the Netherlands where they're not wanting to go into CRISPR for conventional agriculture.

And I sat for two days and listened to the arguments. So I just am concerned that when we put statements like that on the board and then we're saying we shouldn't be spending more time on further defining what is a hydroponic production practice, or a potted plant practice that it really undermines my confidence that we can stay true to the organic practices and principles that we were assigned to address as board members.

(Applause)

DR. TUCKER: Thank you for the comment.

MR. MORTENSEN: So why would we put that bulleted statement on the slide then? That's

NEAL R. GROSS

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

the question.

DR. TUCKER: I would say that the dialogue is already underway, initiated by the board.

There are a number -- you've had a number of proposals related to different excluded methods. Harriet mentioned that right up front in terms of evaluating different technologies.

You're evaluating a proposal today on vaccines.

We have not asked the board to work on anything on this. This is -- the board has initiated this.

And so this robust dialogue is what you are already doing that the board has initiated.

CHAIR BEHAR: I'd just like to just clarify that.

So the NOP does recognize that our robust dialogue, our recommendations on declaring certain -- you know, the lists that we are building on the excluded methods will become kind of an internal and external part of what is considered

NEAL R. GROSS

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

to be excluded within the NOP.

So we are already having that robust dialogue.

DR. TUCKER: You've been having that robust dialogue for quite some time. I don't imagine that anybody would walk into this room and not call this robust, right? This is a robust process and it appears to be well -- it has been an ongoing discussion.

CHAIR BEHAR: We have seen over time that the National Organic Program may choose not to accept our recommendations. So I think there's some concern that we are having the dialogue, but perhaps within the NOP maybe not all of the things that we are considering excluded are at that level with the NOP as well.

DR. TUCKER: When we get recommendations from the board we need to prioritize what we move ahead with at any given time.

Right now our priorities are around enforcement, strengthening organic enforcement

NEAL R. GROSS

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

proposed rule.

We are moving National List rules faster through the system. Eighteen months to a final rule ain't bad.

And overall we have implemented 92 percent of the board's recommendations, within the practice standards category that's 85 percent have been implemented.

We have to pick priorities on what to move forward with and that drives what we do next.

CHAIR BEHAR: Scott.

MR. MORTENSEN: Thank you then. I guess I will just say that I will hope that we adhere to, you know, not be bringing things back up where we've already set through the discussion document process, where we've been very clear and consistent in what we're saying is allowable and not allowable.

Because listening and trying to read into these bulleted statements what is exactly meant by that is not clear to me.

And I do want to be clear that as a board member and a Crops Subcommittee member that gene

NEAL R. GROSS

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

editing is clearly off the table as are the other practices that we worked hard on that document to detail.

DR. TUCKER: This is the robust dialogue. And we always appreciate the recommendations.

CHAIR BEHAR: Scott was next, and then Tom.

MR. RICE: Thanks, Jenny. I have a question on the strengthening organic enforcement rulemaking and just the process, or the 60-day comment period.

In conversations with some in the community, I know with as you describe -- I don't know if it was a big deal or in some ways just, you know, it's significant.

And 60 days at the end of the year as we roll into holidays gives some people stress that that's not enough time and perhaps -- as much as we would like to see the rule, having it arrive at Thanksgiving and Christmastime is stressful.

So wondering if it does come out at that

NEAL R. GROSS

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

time if USDA is open to extending that, or allowing for a greater period? Just want to hear your thoughts on that.

DR. TUCKER: Thanks for the question.

So, we all want to move this rule quickly forward, right.

In fact, there was a provision in the Farm Bill on the exempt handler part. And so we are accountable to Congress as well on this particular item.

So I would -- 60 days is the standard window for comments.

We would like to move this rule along.

I think we all do as you just said.

Often when we issue a rule if people feel like they need more time then they submit a public comment requesting more time and explaining why they need more time. And so that's an official submittal to the document requesting more time as a public comment.

The department then evaluates those requests, the explanation of why more time is needed

NEAL R. GROSS

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

and how many people feel that way.

Again, we'd encourage that if folks can comment within the time period that's always best.

We want to move this along.

If enough people say we need more time then the department will consider that, and have considered that in the past.

CHAIR BEHAR: We do have a little bit of a history. The final rule was given out in Christmas, the organic livestock and poultry practices was right around Christmas. So we have somewhat of a history of kind of right there in the holiday season.

A lot of organic advocates out there reading under the Christmas tree. Tom, you're next.

MR. CHAPMAN: I have a semi-statement and then two questions.

So the first one's on the gene editing. I appreciated the second bullet point that made it extremely clear about gene editing.

And then my semi-statement I guess is

I somewhat disagree with my colleague Dave about the robust dialogue.

I am happy to engage in robust dialogues on virtually any subject. And I just encourage the Program to recognize that there is a forum for that dialogue. That dialogue is the NOSB. I'm taking from your comments, Jenny, that you recognize that. I hope that gets shared up the chain.

Those robust dialogues as you've said already are occurring. You can see it in the livestock proposals. You can see it in the several proposals coming out of the Materials Committee.

So just a strong emphasis that there is a forum. There's no need to change. If there's interested parties there's a format and a methodology for them to come forward with and I hope that gets shared with interested parties.

And even inquiries, if it comes from the legislative branch or other sides. That's the kind of statement.

NEAL R. GROSS

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

Two quick questions. One I think will be easy for you.

I recently spoke at an industry panel and I got just swamped with questions about organic hemp, organic CBD.

And I know there's a policy out there on industrial hemp from the NOP and I was hoping you could comment a bit in light of the 2018 Farm Bill what's the steps, or procedures, or what should we expect from that policy. What's the future here? How can I help answer those questions for those folks?

DR. TUCKER: Thanks for that question.

There is an interim final rule on hemp that will be coming out from our agency. So Agricultural Marketing Service is the lead agency for regulations related to hemp.

That will establish the hemp program called for in the Farm Bill.

And so the best advice for organic farms and businesses is to closely monitor that work and stay connected with their state organizations that

NEAL R. GROSS

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

are pursuing their approach to hemp. And that will vary state to state.

So organic folks need to be very plugged into the broader hemp effort happening in their own state.

So the policy memo for folks who aren't familiar with that, a few years ago there was a statement of principles related to hemp. That was after the last Farm Bill. So after the 2014 Farm Bill.

And there was enough questions on well, what did that statement of principles mean for organic that we issued a policy memo pointing to that statement of principles.

So those statement of principles have not been withdrawn and therefore we have not withdrawn our policy memo.

The fear was if we withdrew the policy memo that given sort of the pent-up demand for hemp that organic farmers would say oh well gosh, the policy memo's gone so we can kind of do what we want to do.

NEAL R. GROSS

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

And so we left the policy memo in place because they were grounded on the statement of principles which is also in place.

We would assume that once the hemp program is established those statement of principles will eventually become overcome by events and that we would withdraw the policy memo at that point in time.

But we encourage any organic producers and handlers interested in this topic to closely monitor what's happening in their states.

Certifiers will also need to be aware of state-level differences in hemp programs so when they're certifying they are aware of those distinctions.

MR. CHAPMAN: Great.

DR. TUCKER: And keep an eye out for the rule.

MR. CHAPMAN: Great. And then my last question was about the increased enforcement rulemaking.

You made a statement on there that got

NEAL R. GROSS

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

applause about all handlers need to be certified.

Handlers is a very large term.

And I still assume there's some exceptions there in handlers. And maybe I'm wrong, so you know, transit and some other folks like that.

But I guess can you explain -- do you have a bit more detail about what you mean by all handlers? Does it include, say, folks that don't take physical possession, but take financial possession? That's just a very broad term right now --

DR. TUCKER: Understood.

MR. CHAPMAN: -- in how the loophole is getting closed.

DR. TUCKER: And I would take that as an invitation to advertise the rule. When the rule comes out make sure you read that section to make sure it is clear who is covered and who isn't covered.

We can say right now that businesses may not be affected. So it becomes easier to talk about who is still outside.

NEAL R. GROSS

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

So businesses may not be affected if they are only a retailer, or only a carrier that only transports products, or only provides storage.

So those are areas in the rule.

If you're only transporting, only providing storage and are a retailer only.

But otherwise most doors are going to be closed.

What we will invite comments on is is that clear. As we've been working on the rule and we've been talking about the rule we've been trying to reach out to communities we haven't talked to before like importers and some of these uncertified handlers who aren't really in the system.

And you start getting some worried looks around the room like oh, actually I should probably be certified right now. And they have been working under the exemption when really they really shouldn't have been.

I think it's very important when people are commenting on the rule to make sure that those lines are as clear as possible in terms of who's

NEAL R. GROSS

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

in and who's out.

MR. CHAPMAN: Quick follow-up on the storage and the transport. Is there any delineation about the packaging of it or anything like that?

I mean, when you think of storage and transit there's some storage facilities that have unpacked goods versus packed goods, or transit that -- a hay trailer, or a bulk tanker of syrup, or a bulk tanker, a bulk ship with grain in it is significantly different than a dry van with packed consumer goods.

Is there a delineation about packaging at all, or is it just storage and transit?

DR. TUCKER: The rule covers -- it's less about sort of the type of business and more about the business activity. So what is that business actually doing.

Hay is one that -- that question comes up a lot. And so when you are reading the rule -- my advice is if you're reading the rule write down all the scenarios like that, like you just

NEAL R. GROSS

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

listed out that you're interested in reading the rule and saying does it cover it, does it not cover it.

And that would be a really good sort of checklist. So before you read the rule write down all the possible scenarios that you would want the rule to address. Then read the rule and see if it addresses those scenarios.

So, the rule is the place to go to read all of those. It does take into account the bulk handling document that's in the handbook.

It is designed to cover that document as well so eventually that would get withdrawn.

MR. CHAPMAN: Okay, thank you.

DR. TUCKER: Good questions.

I Steve.

VICE CHAIR ELA: A couple of things.

The first thing is I really -- obviously our stakeholders have been very busy responding to our very large packet over the last 30 days.

But I just want to reiterate the importance of commenting on these rules. If you

NEAL R. GROSS

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

like them to put those likes in because it's very easy for a couple of negative comments to overwhelm the whole community that likes something that didn't actually say that.

DR. TUCKER: That didn't say they liked it.

VICE CHAIR ELA: Yes. So I just -- even though we're very busy with comments. And I'm the worst about that. I tell all of you I think that's exceedingly important for all the work that we have done and you have done in this open dialogue to then honor that and try and get it over the finish line.

And I also just want to say that I appreciate the Program's work on this go-around to actually have a full 30-day comment period. I know it took some work on the committees as well to get things early, but watching how much Michelle and Devon work through all the things we send them looking for editing comments and making sure they're publishable, and then for the Program to get that out I just want to commend you on that.

NEAL R. GROSS

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

And I think we heard very positive feedback from the stakeholders on that so good job.

DR. TUCKER: Big kudos to Michelle on that. She does an awful lot of heavy lifting. Devon and Michelle are sort of the dynamic duo over there so thanks to you both.

(Applause)

CHAIR BEHAR: Rick.

MR. GREENWOOD: Just a quick comment, Jenny, about storage.

I did some food borne illness investigations on a facility where they had a pesticide company come in and spray and it got on the product.

So I think storage is a tricky area because of how they handle rodent control and everything else.

So I just -- a word of caution. There's storage and storage.

DR. TUCKER: That's the exact kind of comment that when this proposed rule comes out we want to hear about is those different kinds of

NEAL R. GROSS

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

scenarios.

If there is a carve-out or you think that we are not taking a risk-based approach that's the exact type of thing that the proposed rule is designed to elicit comments on.

CHAIR BEHAR: Okay, I just have one other comment myself. I don't see anyone else on the board.

Just want to thank you for moving faster. But as you could tell we have a lot of issues.

And as someone who interacts a lot with farmers and with handlers there are people who are leaving organic because of things that have not been put in place.

And there's a frustration and I think well-founded out in the world especially with the origin of livestock that -- and it wasn't your fault or whatever, but that was -- did go to final rule and really should have come out three years ago instead of now we're going -- it will be six or seven till we see something that can really rectify

NEAL R. GROSS

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

the situation.

And I'm very pleased too with the more enforcement and the training. I think we keep moving down that path, that would really help.

But again, the producers like to see kind of concrete things that they can point to and say we need to follow that rule, everyone needs to follow that rule.

So maybe that's more on Paul's plate to just keep encouraging and putting more people in the standards division as well to get those changes.

Because as I said in the spring, we are a young program. And organic is changing. And we are finding all the loopholes that we had in the original rule, and we're trying to build a better regulation that's more practical and more able to be enforced and verified.

And so we need to be continually improving, not just on the farms and in the processors, but in those regulations.

DR. TUCKER: Thank you for the comment.

NEAL R. GROSS

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

Extending from that we now have sort of three rules that are either open for comment right now or will be opening, strengthening organic enforcement, origin of livestock and the proposed rule for National List.

I would say we've gotten comments through this presentation on at least two of those.

So just to note that we will add a note to the dockets for each of those rules referring back to this meeting so that any comments that were made on the rule will also be sort of cross-linked to those documents.

So if you make a comment on origin of livestock you can still make one in the docket, but don't feel like you have to repeat it twice if you commented here.

CHAIR BEHAR: And lastly, will your slideshow be up on the website?

DR. TUCKER: Yes. I think we generally post that on the web. They have to make it accessible for people with disabilities and then I believe it goes up on this meeting page.

NEAL R. GROSS

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

So if you type in "NOSB meeting Pittsburgh" it usually is a day, a day or so.

CHAIR BEHAR: Anyone else? Okay. We're ahead by 10 minutes. So we will do a 15-minute break, coming back at 10:20. And we will start up with the marine materials panel.

(Whereupon, the above-entitled matter went off the record at 10:06 a.m. and resumed at 10:26 a.m.)

DR. TUCKER: Okay. As we're coming back from break I wanted to reopen the session with happy news. Congratulation update from the National Organic Program.

There have been a couple of times where at this meeting we have announced our employee of the quarter.

Employees of the quarter, that's our highest award within the Program. Every quarter an NOP staff member is acknowledged for great work during that quarter.

Devon received one once here and before that Lisa Brines we acknowledged in this format.

NEAL R. GROSS

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

And so today I am pleased to provide another one of those employee of the quarter because he's here. And it's for Robert Yang.

(Applause)

CHAIR BEHAR: So, as I mentioned earlier Robert is our Assistant Director of Accreditation and he has just been fabulous in deploying a lot of our new tooling.

We have software that helps us run the accreditation program and he has been visionary in thinking about how to exercise that tooling in the best way to be in the right places at the right time.

He was a huge player in bringing in our new audit team. And so he's just done a fabulous job.

So the employee of the quarter gets a -- we call it the roving trophy. And so the employee of the quarter gets to keep this for a quarter and then they pass it to the next person.

And it's gotten a little chipped because one of our winners dropped it. So Robert

NEAL R. GROSS

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

gets that.

And then Robert also gets a certificate of appreciation for being employee of the quarter which he shall display proudly in his office, right?

And then he'll get the choice of an NOP suitcase or a clock that says employee of the quarter. So again, Robert, congratulations and thank you for all you do.

(Applause)

MR. CHAPMAN: Point of order. Congratulations, Robert. But was it Devon who chipped the --

(Laughter)

DR. TUCKER: It was chipped before Devon got it. Present company excluded. And so now I'll turn it back to Harriet. Thank you.

CHAIR BEHAR: Okay, thank you, and thank you, Robert, for all the work you do for us.

Okay, we are now going to have a marine materials panel. As all of you in the audience who have read our docket for the past few meetings we are reviewing marine materials used as an input

NEAL R. GROSS

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

in crop production and if there are issues that we need to address in those materials.

And so who best to have people who know the issue and can help us out.

So I'm going to read the bios for all four of you starting with who will start and then to the end.

So first we will have Dr. Raul Ugarte, a harvester for Acadian Seaplants. Originally from Chile, Dr. Ugarte began his studies at the University of Concepcion.

He continued his scientific training with post-graduate studies at Dalhousie University in Nova Scotia, Canada, culminating with a Ph.D. in marine biology in 1994.

In 1995 Dr. Ugarte joined Acadian Seaplants, Ltd., where he began collaborations with the government scientists on the development of a sustainable management plan for the harvest of *Ascophyllum nodosum* in Atlantic Canada.

In his current role as senior manager of resource science Raul works with a global team

NEAL R. GROSS

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

of marine scientists studying the effect of the harvest on algal habitats and has authored numerous scientific publications on this topic plus the 30 years that he has been working with the seaweeds.

Second up will be Chris Grigsby, a certifier with the Maine Organic Farmers and Gardeners Association, MOFGA, in Maine.

Chris was born and raised in Maine. After college he settled in the Portland, Maine area, working for seafood and produce distributors purchasing and operational management.

Before relocating to the mid-coast with his wife and son and beginning work as general manager at the Belfast Co-Op, Maine's oldest and largest retail food co-op. And they have great scallops there I can tell you.

Moving back to wholesale, Chris was hired as director of operations for a local and organic food distributor serving northern New England.

He became the director of MOFGA certification services in December 2016.

NEAL R. GROSS

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

Chris and his family own a small certified organic wild blueberry operation in Appleton, Maine.

And next will be tag teamers Allison Schmidt and Nichole Price.

Dr. Allison Schmidt is a scientist with Dalhousie University. Dr. Allison Schmidt is a senior instructor in biology at Dalhousie University in Halifax, Nova Scotia, Canada.

Her research focused on human impacts on coastal vegetative ecosystems. She has worked extensively with kelp, rockweed and seagrass ecosystems in Atlantic Canada to explore how finfish aquiculture, seaweed harvesting, invasive species and eutrophication affect the communities associated with structure-forming vegetation and the ecosystem services they provide.

The ecosystem services of interest include habitat and nursery provision as well as carbon storage.

Allison is currently writing reviews on the global extent of these services in all

NEAL R. GROSS

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

coastal vegetative ecosystems. Somewhat complex.

Dr. Nichole Price is a scientist at Bigelow Marine Laboratories. Nichole Price is a senior research scientist and director of the Center for Seafood Solutions at Bigelow Laboratory for Ocean Scientists in East Boothbay, Maine.

Nichole's research and partnerships with NOAA, the Nature Conservancy, the U.S. Geological Survey, the U.S. Fish and Wildlife Service have taken her scuba diving around the globe on coral reefs in Africa, Asia and across remote islands in the Central and South Pacific.

Can I be in your luggage?

Recently she has focused her work in southern California and the Gulf of Maine where she partners closely with the members of seaweed and shellfish industries to develop remediation strategies for ocean acidification, nutrient loading, and low oxygen conditions, and exploring novel uses for marine produced seaweed.

Nichole earned her Ph.D. in marine ecology at the University of California Santa

NEAL R. GROSS

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

Barbara and became an institutional postdoctoral fellow, then project scientist at Scripps Institution of Oceanography before moving to Maine.

Very august group of speakers. So we will start first with Raul and we will let -- Emily, we will let the speakers all speak and then we'll ask questions of the full panel.

Go ahead, Emily.

MS. OAKLEY: And there's a timer in front of you that will go yellow at 11 minutes and then red when your time has come up.

And for the two of you that are tag teaming, that will be ameliorated or augmented for your double time. Thank you.

CHAIR BEHAR: Okay. Dr. Ugarte.

DR. UGARTE: Thank you very much for this opportunity. Today I'm going to focus my presentation on one particular seaweed, *Ascophyllum nodosum*. It's an intertidal seaweed. So it's exposed to the environment twice a day at least.

This is the seaweed that the company

NEAL R. GROSS

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

is harvesting, and this is the reason why we are here indeed.

So, Ascophyllum has been harvested for more than 60 years in Canada sustainable and provides 550 direct jobs, particularly in rural communities in Nova Scotia and New Brunswick.

And we recognize that the seaweed is also habitat. And the habitat is basically composed by the biomass and the plant length and plant density that is there.

We have a team, a global team of scientists and biologists and technicians everywhere we harvest, in Europe and here in North America.

And we have been studying the seaweed for more than 24 years.

Basically the Ascophyllum dynamic, it means the growth, how the seaweed dies, how the seaweed reiterates after the harvest.

So we have quite an extensive database on that area.

And we have published some of these

NEAL R. GROSS

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

issues. So I hope I can today respond to some of the questions posed by the committee and also to clarify some misinformation that has been given by the public regarding to the harvest.

So, the first question is are government regulatory structures in place to ensure habitat protection from over-harvesting of marine algae. The short answer is yes.

In Canada we have -- this resource is managed under the Ocean Act that was implemented in 1997 which promotes an ecosystem approach.

An ecosystem approach basically says that the seaweed cannot be harvested until the maximum sustainable yield. It has to be managed in a way that you cannot make changes in the structure of the resource from one year to the next.

You harvest the seaweed, but that effect has to be replaced around the following year.

So, how do we do that? The resourcing in Canada is spaced along the shore in leases and the government gives leases to different companies.

And within those leases we have small

NEAL R. GROSS

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

management unit or harvesting sector. The idea of that is just you don't concentrate the harvest in one particular spot, but you spread the harvest along the shore in very small units according to what the seaweed is, the abundance of biomass in each one of those sectors. This is called area-based management.

There are more than 400 sectors between Nova Scotia and New Brunswick.

Also we have regulation on the harvesting tool. In Canada we have it with the boat and especially the seine rake. And that rake cut the top of the plant, trim the top of the plant basically leaving quite an abundant biomass, a number of shoots to reiterate for the rest of the plant for the following year.

Also there is a minimum cutting height, that it has to be over 12 centimeters.

Part of the ecosystem approach, we have a restricted area, the area where we cannot go. We have MPAs, marine protected area.

We have exclusion areas. We have a

NEAL R. GROSS

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

special managed area where we cannot go during certain time of the year to protect this area for ducks, for birds that are nesting, et cetera. And that has been published already.

If the company wants to harvest they have to present a management plan. You can see here that the plan consists in putting a budget for every single sector they are going to harvest and when it's done you have the calculated biomass.

And at the end of the harvest season they have to present a management report, a harvesting report. So the government controls that.

The same approach was taken in Maine.

So saying that in Maine there is no regulation is not true.

The second question, who should make the biomass survey. Ideally the government, but just in our leases here we have more than 4,000 kilometers of intertidal.

And in order to get information for appropriate management you need thousands and

NEAL R. GROSS

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

thousands of data to minimize the bioavailability of data along the shore. The resource, it's not the same along the shore so you have to be measuring the resource all over the shore in order to get proper information.

So we sent our team to the shore for five months from June to October and they basically are every single time that the tide allows collecting samples. We collect more than 10,000 samples annually in terms of biomass, plant length and plant density. Okay.

So the government at the end audit the survey. They have companies that allow -- with specialists, statisticians and biologists that check whether our survey was done properly.

Now, another question is there is an efficient method to measure biomass. Yes, there are. But those methods are different depending on the seaweed. I'm going to explain here what we do in Ascophyllum.

You cannot apply these methods to a seaweed like kelp that are subtidal. So this is

NEAL R. GROSS

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

for intertidal seaweed like *Ascophyllum*.

The first thing you have to do is look at area photograph of satellite or drones, and we use all those methods, to determine the area first covered by the resource. So you use this area photograph in low tide.

And then computer program allows you to calculate the area covered by the resource.

But the other part of the calculation is around two things. You have to go to the field and measure every single sector in the field.

I mean, you have to measure the biomass, the plant length and plant density. And all that information then is integrated into a GIS program.

A GIS is basically a program that is consisting of maps, a computer program where you can overlap layers of information. And that is very useful for this kind of management.

So you can see here an example with the lease, with the sector where you have the total biomass and then you have in the sector what is allowed to harvest every year below 25 percent.

NEAL R. GROSS

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

Now, I have here some comment here that in Nova Scotia there is no longer those old forests of Ascophyllum because they have been over-harvested.

Also there are some other comments that the Ascophyllum can live 100 years. So I'm going to show you here why that is not true.

Our research shows that biomass -- Ascophyllum can grow 42 percent of the biomass, new biomass.

I mean, you look at an area, a sector at the end of the year and the biomass that you see there, 42 percent is new. It's generated during the particular season.

Now, what happened with the biomass?

I mean, the plant cannot hold the biomass. Physically it cannot do it because in the wintertime you have effect of the storms that take part of the biomass out.

So it's a cycle of growing seaweed, growing biomass, and leaving biomass at the end of the winter.

NEAL R. GROSS

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

In addition, this is not every year, but it's very often that we have this event. This is ice damage event. And I have seen four major damage events while working with the company.

And those damage events can be devastating. They can clean the shore as you can see here where you lose more than 95 percent of the biomass there, just leaving some remaining of the holdfast and part of the shoot of the plant. And it has been published already.

But you look at six years later the resource comes back.

So, this is the kind of situation that happens along the shore. That situation cannot allow for a plant to survive for a long, long time. There's always being renewal.

So, basically when you look at the shore, I'm going to show Lobster Bay as an example because Lobster Bay has been harvested for 60 years.

And this is the data that you see with long plant in one side of the graph and short plant in the other side.

NEAL R. GROSS

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

So this is what you see in the rockweed bed. Long plant are the canopy and the short plant is the understory.

But you have to get an average of everything. That way you have an average of 88.4 there. And you look at the number of samples. We take thousands of samples to determine that structure.

So in plant length -- so what does the harvester do? You compare two years, 2017, 2018 and you don't see significant difference in the plant length from one year to the next after they've been harvested.

If you look at 20 years, look at 1988 and 2018, 20 years apart, plant length is exactly the same 20 years later. So the harvest has not made any modification on the structure there if we consider the plant length.

You look at biomass. Twenty years ago it was 10.1kg per square meter. Twenty years later 22, 20.8kg per square meter.

So the reason why this change has not

NEAL R. GROSS

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

happened with the harvest is because we harvest less than the annual growth.

And also there is a compensatory mechanism, an interesting effect that happens with the harvest.

If you look here the graph shows the growth in areas that have been permanently closed versus areas that have been harvested for a long, long time and you see that the annual growth is flatter in areas that have been harvested.

So you increase the productivity in areas that have been harvested depending on how you harvest and the way we do it.

Also you increase the absorption of carbon in those areas.

So this is what you see there. When you look at the shoreline this sector has been harvested every year. And the canopy is there.

So there have been studies done on harvest impact. There are studies on fish done in New Brunswick, three-year studies on fish.

There have been studies on eider ducks

NEAL R. GROSS

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

by the University of New Brunswick. There have been studies done in invertebrates by the University of Maine, by Dr. Brian Beal.

None of those studies have shown any impact by the way we harvest seaweed on those organisms.

So, as a conclusion there are reviews and studies that have shown that *Ascophyllum* is very resilient and it's a very dynamic seaweed.

It's not the old forest that some people claim is there.

There are regulations in place to maintain the structure of the resource and the habitat. It's a precautionary approach.

And there is no evidence from studies that the harvest is impacting the associated fauna.

Thank you very much.

CHAIR BEHAR: Okay. So next up is Chris Grigsby. And thank you for all the photos. That's very helpful.

MR. GRIGSBY: Well, thanks, everyone for the opportunity. I appreciate that. My

NEAL R. GROSS

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

presentation has a lot less pictures. I tend to be a little bit wordy I guess with slides so I apologize for that.

At any rate, so based on the introduction there from Harriet I think folks know sort of where we're located.

We are an accredited certifier, USDA, so we can certify I guess anywhere in the country if we chose or wherever, but we don't. We pretty much stick in Maine which is just fine with all of us that are there.

But at any rate, I wanted to -- so I submitted written questions to the committee in terms of our responses for this present meeting.

But I chose to focus my presentation on sort of what we do currently for organic certification just because that does seem to be sort of the crux of the conversation with the NOSB as far as whether to require aquatic plant extracts for crop inputs to be certified organic.

So I just wanted to give everybody a sense of kind of what we do with the regulations

NEAL R. GROSS

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

and the guidance that we have currently.

So I wanted to just sort of -- again, a lot of folks may know this, but just bring in some historical references and kind of a how we got here type of scenario.

So in 2011 the NOP issued guidance, Wild Crop Harvesting Guidance which basically then sort of stated that wild crop harvesting of species from terrestrial or aquatic areas can be certified as organic. Kelp or seaweed are included there.

And then a couple of years later NOP 5027, the Use of Kelp in Organic Livestock Feed.

This is really sort of where MOFGA certification, we had our first application from a seaweed harvester that was getting into the livestock feed supplement game.

And so just a couple of excerpted pieces from 5027. The NOP recognizes there is inconsistency in the use of organic kelp in organic livestock feed due to lack of guidance and confusion regarding the agricultural status of kelp.

And then it goes on to further state

NEAL R. GROSS

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

that because it's listed in 205.606 the NOP considers kelp an agricultural product and therefore kelp must be certified organic to be included in livestock feed.

So we didn't actively engage. We were sort of dragged into it.

In the response to comments 5027-1, changes requested but not made. I just wanted to sort of highlight this just because we are still sort of in the same scenario that we were when this guidance was issued which is that the NOP notes that additional training for certifiers on the topic of wild crop harvesting will be considered in the future.

I think that that's something that we have submitted in comments previously that would be fantastic to sort of see something like that.

I think that we are trying to do a lot with a little and doing our best.

So the other piece that we always have to keep in mind as accredited certifiers is the terms of accreditation.

NEAL R. GROSS

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

I just wanted to highlight a couple of the points that are in the terms of accreditation sheet that we all sign off on and do our best with.

Should we accept the certification decisions made by another certifying agent, accreditor accepted by USDA.

And we also cannot require as a condition of certification that any client comply with any production or handling practice other than those required by the USDA organic regulations.

Okay, so a little bit of a MOFGA story here. We first certified kelp under the wild crop standard in 2013.

We currently have six operations that are certified to the wild crop standard for kelp.

And when we received an application in 2013 that sort of started the ball rolling and we utilized another accredited certifier, OCIA, who had published standards for wild crop seaweed in 2006.

And so we basically, based on the terms of accreditation we accepted that by the other

NEAL R. GROSS

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

certifier.

And so we utilized those same buffer setbacks which you can see here, 20 miles from a nuclear facility. Maine no longer has a nuclear facility.

Three miles from commercial boat-building, three miles from industrial waste discharge, three miles from any city or town sewage discharge, three miles from any major harbor or thoroughfare, three quarter mile from small harbor.

We define small harbor as having moorings up to 20 boats. That was something that we actually added fairly recently because we had some questions from certified operations about that.

Three quarters of a mile from minor waste water treatment facilities, and a quarter mile from any overboard discharge areas.

And then there's a note in there about sort of beds location, prevailing winds, currents, and testing, tissue testing is a possibility to

NEAL R. GROSS

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

sort of help to determine those things.

This is a little bit of an excerpt from our Sea Vegetable OSP Supplement just in terms of these are the types of questions that we're asking applicants and certified operations which they sort of update, renew. We inspect and verify against that part of their OSP.

So a description of the natural environment, list of any rare, endangered terrestrial or aquatic plants, describe the methods used to prevent negative impact to the harvest area, monitoring procedures used to verify lack of impact on the aquatic ecosystem water quality and biodiversity.

How do harvest practices ensure the health sustained growth and long-term viability of the wild crops.

Approximately what percent of the wild crop is harvested at each harvest.

Training, frequency of training. Procedures in place to prevent contamination and then record-keeping systems for wild crop area

NEAL R. GROSS

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

management, monitoring, harvest and sales.

And I would say that that last point is something that we have been addressing and have been focusing our inspectors to dive a little deeper on over the past couple of years.

So in terms of the reviewer's role, the desk audit that's performed both with applicants and renewing clients.

So we utilize GIS and Google Earth mapping of our buffers based on Maine's Department of Marine Resources and Department of Environmental Protection data sets to determine site eligibility for organic harvest. So that's sort of the first point.

And then we follow that up with physical onsite inspection.

And those data sets are great. It's fantastic. They overlay right in there and we get a really good picture of where the waste water treatment plants are, overboard discharge, active harbors, et cetera.

And then sector maps are now

NEAL R. GROSS

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

consistent. So the Department of Marine Resources has adopted the sector mapping as Raul mentioned they have in Canada as well.

And so there's now clearly defined sector maps for all harvest areas along the coast of Maine.

And so when an applicant or renewing client submits either -- their harvest areas they give us GPS coordinates.

We're able to plug those in. And then that's the same sector and coordinates that they use to submit landing records to the Department of Marine Resources as required.

So in terms of the wild crop standard 207 we do our very best to determine what that is without going above and beyond our accreditation requirements.

And so without NOP regulations and definitions specific to that we actually turned to the folks in Maine that are doing really a pretty good job we feel like in terms of the monitoring, the training.

NEAL R. GROSS

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

The Maine Seaweed Council issued Harvester's Guidelines to Maine Seaweeds where they go through specie by specie and sort of try to give some framework to sort of amount harvested, percentage per year, those types of things. And that's all available online as well.

And so specifically to *Ascophyllum nodosum* the suggestion is 17 percent per year, or 50 percent over three years.

So that's our general -- again, we're not doing specific biomass assessments. But when our inspectors do go out there they're going to go out there, they're going to go out on the boat, they're going to view a harvest taking place, whether it's by hand or mechanical which is tide dependent.

So it does present some challenges in terms of being creative about those sort of things.

And then we also ask them to go and view selected harvest areas from the prior year for compliance. And then we shift those locations over time.

NEAL R. GROSS

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

Maine has over 5,200 miles of coastline I think so clearly we're not getting to every particular spot every year.

So I just wanted to shift a little bit.

So that's generally sort of where we're at in terms of our certification of the livestock feed or human consumption components.

And then I just wanted to shift briefly in the minute and a half I have here, just listing out some of our comments to the NOSB over time.

So we definitely support stricter measurements. We don't feel like certification may be the right way to go just because we don't really feel like the certification components are where they need to be either.

So we suggested development of an annotation for 601(j)(1) which may be able to sort of specifically tie back to the wild crop standard.

We definitely support NOSB and NOP developing aquatic plant standards. We think that would be a good thing both for the work that we do as well as the consumers and stakeholders out

NEAL R. GROSS

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

there.

We do worry that the requirement of -- requiring certification for aquatic plant extracts for crop inputs would push all harvesters to sort of what we consider the pristine areas based on the buffer setbacks.

And so we kind of worry about over-harvesting and also Maine does not have leases for rockweed. So it's really sort of handshake agreements between harvesters.

And so that may present some challenges as well.

This past spring we -- in our comments we offered more for the board to consider in terms of what Maine is doing.

So there was a legislative act in LD 585 in Maine that required a fishery management plan for rockweed.

And so that was completed and issued in January 2014.

I believe -- and again, that sort of set up the -- what we have at this point as far

NEAL R. GROSS

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

as sustainability of the harvesting specifically.

There was also a component of that work that -- there was a working group that I believe was developed to look at the ecosystem as a whole and impacts of harvesting.

But I believe at least from what I heard I think that there was -- it was a bit politically charged and I believe the working group disbanded without really doing much at that point. But I think that those are great things.

And I would just also mention briefly that there is a lot of research happening in Maine now at this point.

There's -- the University of Maine and the Maine Sea Grant, they have a project going which is conserving rockweed animal systems for sustainable harvest.

One of their stated goals is to understand the role of rockweed and rocky intertidal invertebrate bird food webs in light of harvesting. And so again we encourage all of that work.

NEAL R. GROSS

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

I believe that's it. I just I guess -- oh, I think I'm over time. There's a red light on.

CHAIR BEHAR: Okay, good job. So now I'm just going to open this to Allison and Nichole. And do you have a slideshow? Michelle is shaking yes. Okay.

DR. PRICE: All right. Before we get started I just wanted to give a little further introduction to myself.

I'm currently serving -- my name's Nichole Price. I'm also serving on the Maine Seaweed Fisheries Advisory Council.

And I've just been appointed to the Science and Tech Subcommittee of the Maine Climate Change Council as well. And I'll hand it over to Allison to get started.

DR. SCHMIDT: Yes. So, what we wanted to do is -- I'm Allison Schmidt -- is to give you a little bit of background to give you some context on our recommendations and what I guess the answers to our questions that you put out to scientists.

NEAL R. GROSS

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

So we wanted to start off kind of back to the basics as to what really is macroalgae.

And it really consists of large green, red and brown species of seaweed. And there's thousands of species around the world not all of which are economically viable for harvesting.

And they're similar to land plants because they do photosynthesize and they are foundation species for a lot of communities and ecosystems.

And they are what we call ecosystem engineers because they form a three-dimensional structure similar to trees or meadows.

And we often use that kind of language to refer to these ecosystems. So for example, kelp forests, or rockweed beds, or meadows of seagrass.

So those are -- we tend to use what we know to describe things that are harder to see.

And the main difference that there are from terrestrial plants is that they don't have a root system to absorb nutrients from the sediment, or from the rocks. And they don't have a vascular

NEAL R. GROSS

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

system.

Because they live in a fluid environment they're able to actually absorb and exchange what they need from the water directly.

So they don't, like terrestrial plants, take things up from the soil.

So there are a number of species that are harvested and they form -- different species in temperate versus tropical areas.

And they fall into a number of different groups.

So we've got canopy-forming species.

So those are the ones that we tend to refer to as forests.

Coralline species which create this calcium carbonate shell as part of their structure.

And then blooming species which tend to -- are more ephemeral. So they're kind of annual. So they create these large blooms and then they die back.

And then we have understory species.

So those are the ones that would grow underneath

NEAL R. GROSS

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

the canopy of whatever large seaweed there is.

And you can see that we do harvest a lot more in the temperate zone than we do in the tropical areas.

And the species on the slides are organized by whichever grouping they fall into, whether it's red, green, or brown.

So we do need to make a distinction between tropical and temperate ecosystems.

So in tropical ecosystems algae tend to be more of a problem in terms of when they have -- they occur in great abundance because they compete with corals.

Corals are the main structure-forming species in the tropics. And so when algae do colonize and take over it actually simplifies the ecosystem and decreases the three-dimensional architecture.

Whereas in temperate ecosystems we don't have coral reefs and these algae are actually the main structure-forming organisms in the ecosystem. So they're extremely important.

NEAL R. GROSS

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

So the impacts of harvesting in these two different types of ecosystems are going to be somewhat different.

Similar but also with some differences in terms of the scale of the impact.

So another important piece is to understand how they do actually attach and grow.

So most species are attached to rocks, specifically with a holdfast. And it can be either branching or discoid as you can see in the top two photos.

But there are some species that are free floating in the water column and we'll talk about those as well.

But all of them grow from a meristem.

So it's a point on the plant where the tissue starts to grow.

And there's an apical meristem which is on the tip of the plant, or what we call a basal meristem which is in the second photo on the bottom where it's closer to where the stipe is. So what we would call like the stem of the plant.

NEAL R. GROSS

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

So where those plants grow from do have an impact on how it can be harvested. So most species that have a discoid holdfast, they can grow new blades from the holdfast if it's left behind.

And species with a branching holdfast, they will not regrow new blades if the holdfast is the only thing that's left behind.

You have to actually leave the growing tissue behind, the meristem. So you would have to cut further up on the plant.

So recovery of those particular species would depend on new plants growing up from juveniles.

DR. PRICE: So macroalgal growth is undergoing a series of change.

This is some data captured just this year using NASA satellites Terra and Aqua to describe the extent of the Great Atlantic Sargassum Belt.

This sargassum bloom has been going on for a long time, but in 2011 there was a turning point where the bloom started vastly becoming

NEAL R. GROSS

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

expanded in size and extent.

It's now about 8,850km long and it represents the world's largest macroalgal bloom.

And these kinds of blooms may become the new normal.

And it is an opportunity for innovation, thinking about what can happen with this biomass.

DR. SCHMIDT: Sorry, I was just going to jump in. This is a free floating form of seaweed.

DR. PRICE: So free floating meaning it gets washed up on the shores and actually removal of that large amount of biomass is a problem that is dealt with by several countries.

The attached species though can provide several different ecosystem functions and services.

They do provide that 3D structure which is essential habitat and food for many species including commercially important species like lobster, cod, kelp bass and rockfish.

NEAL R. GROSS

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

But these systems shouldn't be viewed the same way as coral reefs. They're extremely dynamic in space and time.

Natural disturbances such as storms and ice scour can dislodge the holdfasts. Herbivory itself can create barren landscapes. Urchin barrens are part of a dynamic system both on the west and the east coast of the U.S.

And many kelps grow very fast, but are short-lived.

Other important ecosystem functions and services include those that come along with primary productivity.

In particular, carbon capture, nitrogen and phosphorus capture and exchange.

There can be active transport onshore or to deeper beds as detritus or senescent material from the kelp forest gets delivered to either of those.

And CO₂ can be released back into the system as part of the decomposition process.

Just to remind everyone how important

NEAL R. GROSS

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

the presence of large concentrations of carbon dioxide is to marine systems this is what causes ocean acidification.

And it's the global atmospheric carbon getting absorbed by the oceans that is causing this process on a large scale, but there are other processes on smaller scales and coastal systems that exacerbate ocean acidification.

And so this ecosystem function of storing or transporting carbon is really relevant to this global problem.

So they perform both primary and secondary productivity. But the detritus that is produced and delivered to especially beach systems can subsidize those systems in terms of providing structure and organic material in those systems as well.

Canopy-forming species also buffer wave action in storms.

But the scale or impact or relative importance of these ecosystem functions and services really depends on the macroalgal species,

NEAL R. GROSS

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

frond size and morphology, the standing stock that's present.

If you have a very tiny patch of forest versus an extensive coastline those impacts are different.

The architecture and distribution of those patches of forest and the connectivity between them.

I think it's important to take all of this context, all of these concerns about wild harvest in the context of the greater picture of what's happening with aquiculture for kelp and other species not only in the U.S. but across the globe.

So aquiculture production of brown algae is 18 times greater than wild harvest. And the total aquiculture production of all species, reds and greens included, is 28 times greater than wild harvest.

And over the past 80 years or so we've moved from nearly 100 percent wild harvest to less than 4 percent wild harvest.

NEAL R. GROSS

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

Aquiculture is growing at a rate of on average about 8 percent per year since the nineteen seventies. And seven new countries including the U.S. have started seaweed farming since 2010.

So this is a graphic that I'm sorry the writing is small, but that black line going across is potato production.

And if aquiculture continues to rise the faded green line shows that by the year 2050 aquiculture production of seaweed might produce the same biomass as potato production worldwide.

And if the subsidies to research and innovation in seaweed aquiculture continue and developments improve to create a 10 percent greater yield than we can currently see then you might expect for aquiculture of seaweed to even exceed that of potatoes.

Just as a note the Department of Energy ARPA-E MARINER Program has contributed something like \$25 to \$40 million to research on seaweed aquiculture alone.

I also wanted -- we wanted to talk a

NEAL R. GROSS

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

little bit too about the differences in harvesting techniques across these different guilds of species.

So Allison mentioned the coralline algae deposit, the calcium carbonate. This means like corals they grow extremely slowly, on the order of millimeters per year.

And it's difficult to cultivate. I don't know of anyone doing that.

But many fleshy species grow to a harvestable size in less than a year and suspension culture techniques are becoming available for these.

DR. SCHMIDT: So we wanted to focus some of the harvesting effects on the canopy-forming species because those tend to be the ones that have the most research done on them.

So some of the effects are reducing the standing stock. So Dr. Ugarte did mention about the truncation, or the changes in the size structure.

And I have a few graphs on the slide

NEAL R. GROSS

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

that show the changes in size structure. In the column on the lefthand side you see pre-harvesting situation with the top graph being length and the bottom graph being circumference.

And the lefthand side of the graph is smaller sized plants, and then the right-hand side would be large plants.

And you can see sites that have been harvested in blue and unharvested in red.

What you see in the pre-harvest is there's a peak kind of, they kind of -- both distributions peak around the same.

But then when you harvest them, so in the graphs on the right-hand side you have the shift in the peak in both the length and circumference to be smaller plants. So their length is shorter and their circumference is smaller.

And that's important because that then affects the three-dimensional architecture of the habitat which could influence the species living there.

So the fronds that are harvested have,

NEAL R. GROSS

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

like I said, smaller average size. And that means that there's less large, old and voluminous fronds.

And if you think about a forest this would essentially be cutting the forest from trees down to something like blades of grass.

So they would change the structure, maybe not completely down to blades of grass, but it does change the structure of the ecosystem.

So as a result you get bushier plants, especially in things like rockweed. And you can see some images on the slide here.

The one on the very far right in the background you can see a tall unharvested plant and in the front you can see a harvested plant. You can see the cut tips of it.

So this was taken after they did the cutter rig harvesting. And you can see there's some harvesting where there is sometimes some impact on the holdfast because, I mean, you're in a boat. You're moving up and down with the waves and it's sometimes harder to control just how deep it goes.

NEAL R. GROSS

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

But those are some of the underwater views of the impact of harvesting.

And this -- you can also have an increase or a decrease in the number of individuals.

This depends on the species.

So I don't want to focus just on rockweed in this talk. We want to talk more broadly than that.

So sometimes in the case of rockweed you'll have more individuals come up. And in other times you'll have less individuals come back.

You do have a decrease in the number of juveniles, especially in situations of kelp beds. And we'll look at a case study in a little bit because you have increased competition, or you're actually removing the reproductive organs depending on the time of year that you're actually harvesting the seaweed.

And we've seen some of that impact in species such as *Chondrus crispus*.

And the recovery time depends on the harvest methods. And it can be from months to

NEAL R. GROSS

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

decades.

If you clearcut something it can be decades, and if you're just cutting tips then it may only be months before you have a recovery.

So, this -- how harvesting can affect the ecosystem overall rather than just the actual resource itself is you can have increased patchiness and that can alter the species distribution, so the associated species and their interactions.

You can have bycatch, so epiphytes and slow-moving animals. You change the habitat architecture which can lead to an impoverished community. I have a diagram there on the right-hand side that shows changes in a kelp forest not necessarily due to harvesting, other stressors, but the result is the same where you have a different community depending on what the resulting change is.

And that talks about shifts in the foundation species. So if you harvest the kelp and then kelp doesn't come back, but instead you

NEAL R. GROSS

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

have something else come back then that will shift the species that live there.

And you may have associated declines in biodiversity not only in that ecosystem, but then adjacent ones because you no longer have a source population feeding into these other ecosystems.

And you can also have decreased epiphyte communities that are attached to the canopy-forming species because you're actually removing them when you're harvesting because they're part of the bycatch.

DR. PRICE: So to continue along this theme about harvesting effects on ecosystem services there can be this initial decrease in habitat provision for breeding, spawning, nursery and other important roles for commercially important fisheries and initial decrease in productivity.

But as Dr. Ugarte pointed out earlier in some cases the seaweeds recover. The growth rates may actually be stimulated.

NEAL R. GROSS

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

So to go back to the metaphor that Allison gave, when you mow a lawn it can be stimulated to grow back.

These are some results from a preliminary study that I conducted over the past couple of years looking at a simulated harvest area next to Bigelow and a non-harvest area.

And what we measured was the ability for the individuals in those areas to absorb carbon dioxide and thus change seawater pH in the months following the harvest.

So this first month of May was when the harvest occurred. And then as you move on until about five months post-harvest you actually see evidence of increased productivity rates of the harvested or clipped individuals as opposed to the individuals that were not clipped.

So there needs to be a balanced view about what we want as ecosystem services from these forests and beds, and whether carbon capture is an important part of that consideration.

I'm going to walk through another case

NEAL R. GROSS

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

study of *Macrocystis pyrifera*. So that previous set of preliminary data was from rockweed, but we wanted to give you a taste for what other species are getting harvested out there and the impacts.

So giant kelp covers a large portion of the Pacific coast of North America. And this study followed artisanal harvesting practices. So there was a swimmer on the surface of the water that was clipping the tips of the fronds that were available. So it was very much a labor by a couple of individuals to get this done.

And it was over a small area, just 0.09km of the coastline.

But they did different levels of removal and looked at biomass recovery at 3 weeks post-harvest and at 10 weeks post-harvest. So it was a short and small study.

Growth rate was lower in the harvested sites, but it was also evident that it was very negatively affected by increased sea surface temperature.

And so one important piece to consider

NEAL R. GROSS

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

in all of these questions that have been posed to us is what role does global change and ocean change play in the ability for these systems to recover or their relative impact.

They did detect that juvenile density decreased with higher harvest intensity which was more than 60 percent removal, but they did not find any effect on fish abundance and they did not examine the other invertebrate or epiphytic species that were part of that system.

And again, temperature is an important factor in the recover of *Macrocystis pyrifera*, otherwise known as giant kelp in these systems.

DR. SCHMIDT: So a second case study that we wanted to talk about is looking at a trawl harvest of *Laminaria hyperborea* which is a kelp species that's found in Europe, in northern Europe.

It covers about 9,000km of the West Atlantic coast of Europe. And what they did is they, like I said, they did some trawl survey tracks.

And you can see in the images on the

NEAL R. GROSS

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

slide in the foreground of the photo on the left you've got recovering kelp blades and in the background you have the unharvested kelp growing much taller.

And you can see they drag one of these giant hooks, that's the photo on the right, through the kelp bed and it essentially collects everything including the holdfast.

It does leave some juveniles behind, but any of the large plants get collected.

This was a rare study in that they actually monitored post-harvesting for four years.

So they looked a little bit longer term at the results.

And what they saw is that canopy height after two years was only 30 percent the initial height. So it was 70 percent shorter still.

But that it had grown to about 70 percent the initial height after four years.

The density almost doubled one year.

So the number of individual plants there doubled almost one year post-harvest.

NEAL R. GROSS

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

And that was because it left behind the juveniles and they had the opportunity to grow up because they no longer had the adults shading them.

So there was quite a big recovery in terms of number of individuals.

But that had the impact of actually decreasing the amount of juveniles then that were left behind on the bottom.

So that means if you were to go back and harvest again you're not going to have that regrowth happening because those juveniles are not there. Well, there's only 30 percent of what had originally been there after four years.

So even after four years length of time the reproduction of those kelps was not sufficient to restock that understory.

And the plant age decreased from 10 years old to 6 years old. And that was because obviously all these young plants were growing up.

And you can see that in the photos. You can see the change in age based on the rings because they're like trees. You can count their

NEAL R. GROSS

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

age by looking at the tree rings of the growth.

And then the mass of the individuals was 50 percent lower than the initial mass of the bed even four years after harvest.

So even though these plants are recovering and you have a huge increase in density they're not actually as heavy or as large as the original plants were.

There was also a 65 percent decline in the epiphyte weight. So they were measuring the amount of organisms that were colonizing these blades and that was still 65 percent less four years after harvest. So it's taking a long time for these species to come back and recover and recolonize this area.

Even though the canopy biomass when you looked at it at a bed scale, the canopy biomass was similar pre-harvest to four years post-harvest.

But all of these other changes in structure were happening.

They did look at one other species which was sea urchins and there was no effect on their

NEAL R. GROSS

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

abundance. But they didn't look at any of the other invertebrates or fish species associated with these ecosystems. So that's one piece that is missing, to see how they would be affected.

So, one of the things that we were -- as we were working through we were thinking about the questions that you had asked us, and thinking about the best approaches to take with respect to seaweeds on kind of a broad scale.

One of the key pieces of information that's really needed is baseline biomass assessments to be able to manage the natural resource.

We would recommend minimum cutting heights and minimal holdfast removal. And methods of harvest should be the most efficient at meeting whatever those minimum cutting heights are or holdfast requirements are.

So essentially if you want to keep the holdfast in place you don't want to be doing any trawling, for example.

And also minimize bottom disturbance

NEAL R. GROSS

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

which would again limit the trawling option.

We also would recommend conservative quotas on the amount of biomass that's removed within a bed. And this needs to be based on evidence of impact. And we'll talk a bit more about that in a moment.

And it may require specific guidelines for particular guilds. So again looking at coralline algae versus canopy species.

You're probably going to have to -- it's not going to be enough to say it's going to be 17 percent removal for all species of algae.

It's going to have to be divided into the different kinds of algae that are there, that are being harvested.

DR. PRICE: So, Dr. Ugarte went over some standing stock assessment methods. And I just want to review again quickly because I see that we're over time some of the newer methods that are getting developed that are really interesting.

So there's the field-based biomass measurements that are the bread and butter. There

NEAL R. GROSS

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

are potential uses of environmental DNA. So you can take a water sample over a bed and from the gene copy number in that water sample determine the biomass of the species that's present in that area.

These methods are really new and still need to be validated, but they're exciting.

And then there are remote sensing abilities for canopy-forming species, intertidal species and subtidal species.

So there's a paper that just came out this year that goes through kind of a decision tree of when you might want to use one of these types of remote sensing, be they acoustic or optics to survey for biomass.

But I wanted to mention in addition to this graphic there's also hyperspectral which is another level above multispectral imagery that can potentially give you information not only about the biomass of particular species in a system, but what reproductive state they're in and also maybe some information about their relative productivity

NEAL R. GROSS

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

level.

So there are new tools out there that can help achieve these management goals.

So, for some of the ecobased management ideas that we reviewed in our review of the primary literature and agree on is that maintenance of closed areas is instrumental for baseline assessments of functions and services, that seasonal closures are important for algal growth and reproduction as well as reproduction or other processes of dependent species, that fallow periods allow recovery of biomass, 3D structure and other ecosystem services like carbon capture.

Spatial management should be practiced to facilitate connectivity. By that we mean that this sector-based management approach is a great way to ensure that certain areas are not over-harvested, and that there are like hopping islands ways for individual species to transport and be distributed among those different beds or forests.

And we really wanted to stress that it's

NEAL R. GROSS

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

important to note that there are U.S. wild harvest companies that self-regulate and follow these management practices voluntarily.

So to some degree it's also beholden to the purchaser of those products to understand from whom they are buying and what practices those companies follow.

And we will stop there, but we do have short answers to each of the questions that the panel has asked that we could review as needed. Thank you.

(Applause)

CHAIR BEHAR: Okay, thank you. Yes, that's excellent.

Okay, so we have time for questions.

I know I took quite a few notes, from the board for our panelists.

Emily, I'm not surprised.

MS. OAKLEY: Well, I have a lot of questions obviously some of which I'll probably have to ask at lunch with some of you guys.

But I'll wait to ask some of my

NEAL R. GROSS

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

questions. I wanted to just give everybody a chance if they're not too bashful to jump in first.

CHAIR BEHAR: Dave.

MR. MORTENSEN: I was -- often the case studies or examples that you would lift up were species specific, one species.

In reading through the material that we've been reviewing over the last year I have often wondered if you look out into a forest, a terrestrial forest you would see many species.

The photograph that Raul showed of the rockweed did look like close to a monoculture. I don't know.

So, to what extent when you're harvesting Laminaria or Ascophyllum are we harvesting a monoculture, or we're harvesting a diverse community of species?

A lot of your pen and ink illustrations tended to show a community that's diverse with many species.

DR. UGARTE: Well, the difference between tropical and temperate areas is that

NEAL R. GROSS

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

seaweed in temperate areas tend to form monocultures. That's why you have this harvesting activity, because you have a lot of biomass of a single species there.

Now, there is no question that there are other species living there as we all recognize.

So the point here is how you harvest, how much you harvest and what effect you exert on those organisms that are there.

So, the point is whether that impact is acceptable or not. This is the question.

But normally companies harvest as a monoculture because this is what you have there.

Ninety something percent of the biomass is just the pure species that is there in terms of seaweed.

DR. SCHMIDT: So you also have -- so what you normally see, so like the photo that he showed with the rockweed bed is you see the dominant species which is rockweed.

But you do have understory species. And that's the same with kelp. You'll have a dominant species of kelp that is the main

NEAL R. GROSS

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

structure-forming part, and then you have understory species that are lesser -- well, either smaller or they grow up afterwards, or they're adapted to live as understory species.

So when we look at a larger scale you don't necessarily see all of those details even though in the pen and ink drawings it emphasizes a little bit more that there's more structure than just the one species.

DR. PRICE: I would say to follow up too you brought up the tropical species and the diversity in tropical systems.

When I first read over this report and noticed that dictyosphaeria cavernosa was among the wild harvested species for fertilizer I was shocked because I collect that species for experiments.

It's really hard to get at and it's sparse unless it's undergone a bloom. In that case you also have a monoculture mat of a singular species that is easier to harvest.

CHAIR BEHAR: Steve. Anyone else

NEAL R. GROSS

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

raising hands? Asa, okay.

VICE CHAIR ELA: I guess one of the -- from public comments and previous things. I'm certainly not a marine expert coming from Colorado, but it strikes me that Maine, Canada, Nova Scotia, I mean that the harvest standards are -- I mean there's a lot of time and work that's gone into that. Regulated, monitored.

One of the big concerns I have as a farmer who buys occasionally seaweed products is that while that area is well regulated. We get these products from around the world.

And I think that's something this board has to deal with to not ignore that one highly regulated area or really well done area that we say oh good, we don't have a problem, when worldwide we may have a huge problem.

And so I'm very curious, I mean and certainly the wild harvest standards are one way of addressing that. We've got a lot of feedback that probably the industry doesn't want that.

But if we don't have that how do we

NEAL R. GROSS

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

address international equivalencies and standards in terms of really protecting what are very valuable resources?

DR. SCHMIDT: One of the recommendations that I saw in a recent paper that was just published about ecosystem-based management of wild seaweed harvesting would be to use the Marine, what is it, the MAC.

It's -- sorry, I didn't get the acronym.

But there's an international -- the MSC. So they actually certify fish as sustainably harvested.

So it's an international standard that's created for fish, but they've also now moved into seaweed and seaweed harvesting to try to certify those.

So that would potentially be one avenue is to look at getting international products certified by the MSC standards for seaweed harvesting and seaweed aquiculture. That could be one route.

DR. PRICE: The ASC and MSC released a joint set of standards for both aquiculture and

NEAL R. GROSS

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

wild harvested seaweed species.

DR. UGARTE: That's correct. That organization is just starting the certification of seaweed.

And we totally agree with that kind of approach to certify products. Indeed our company is implementing the same approach that we have in Canada in every country that we go, in Ireland and in Scotland.

So we have exactly the same area-based management, implementation rates and other kind of regulation.

CHAIR BEHAR: Asa?

MR. BRADMAN: I had a question for Chris. I'm curious how you establish the buffers for the -- I think that was a wild crop criteria.

And then you mentioned you require testing. And I wasn't quite clear if that was if it was less than the buffer, or in general.

And I'm curious about what has been tested for and has there ever been a level of concern for any of the things that have been tested for

NEAL R. GROSS

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

contaminants.

MR. GRIGSBY: So your first question about the buffer establishments. So we, OCIA had already developed those I think through work with a fellow named Shep Erhart who owns Maine Coast Sea Vegetables in Hancock, Maine.

And I think that that work had begun maybe in the nineties.

And so we just sort of felt like that was sort of the best thing that we could see.

And there was already -- it was in place and it was already -- Maine Coast Sea Vegetables is certified by OCIA and so we just sort of took that as really the best point that we had.

And we do apply those same buffer setbacks also to cultivated. So line-grown kelp and things like that. And so we utilize the same buffer setbacks for cultivated as well as wild.

And in terms of the testing, again a lot of times it's industry led. The industry and certain companies will sort of do their own testing for heavy metals and other pollutants and things

NEAL R. GROSS

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

of that nature.

So we really sort of stick with the pesticide residue through our random sampling. We include seaweed in that program.

So we haven't -- up to this point to my knowledge we have not had any issues where there were concerns kind of around the buffers, although we do get pushback from time to time from harvesters around the sort of scenario of you're telling me that if I'm harvesting 20 feet inside the buffer zone it's not certifiable, but 20 feet outside it is.

So again I think lack of clarity around that in terms of the requirements is an issue.

MR. BRADMAN: Does the testing ever include like anti-fouling agents that are used on ships or boats?

MR. GRIGSBY: Not at this point, no. No. Part of the organic system plan is sort of the post-harvest handling component. And so I think that in most cases we don't feel there is a risk to sort of boat contaminations and things

NEAL R. GROSS

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

like that.

Like a lot of people will use methods to separate the harvested product from the components of the boat specifically.

MR. BRADMAN: Thanks.

DR. PRICE: If I could jump in on that question. Sometimes people do test for copper in the tissue of seaweed which would be indicative of anti-fouling. Paints and things.

CHAIR BEHAR: Okay. I just want to jump in because it kind of follows a little bit.

Is it too difficult or not an issue to kind of track the usual ocean currents? Because three miles away, I know that there are some areas that would get infiltration more than others. Or is that just too difficult to track? In the certification when you're saying a certain buffer size.

MR. GRIGSBY: Yes, I would say there's difficulty there.

I think for the most part the harvesters are just kind of maintaining -- they're not really

NEAL R. GROSS

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

pushing up against sort of those buffers.

A lot of times they will just factor that in to their harvesting scenarios.

And I'd also add too that the Department of Environmental Protection and Marine Resources, there are websites available to the harvesters and for the most part in a lot of the responses to the monitoring questions that we ask folks will utilize that and check that on a sometimes daily or weekly basis where there are reports of spills, or other potential closures and things like that that may occur throughout the harvest season.

DR. PRICE: Yes, it's really expensive and difficult to model accurately ocean circulation.

There will be places along the coastline where researchers have invested lots of time and equipment in building really well validated models.

But there are more areas that do not have that kind of modeling available than there are areas that do.

NEAL R. GROSS

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

So perhaps over time that kind of information may be more accessible, but it's very difficult.

CHAIR BEHAR: I'm just going to ask because I know you have a long list so I'm not going to do my long list.

When you say that harvesters have a handshake agreement between who harvests what area.

Especially if we have a voluntary aspect where one harvests and then nobody comes back in for whatever, six months or a year.

If it's just a handshake, or you have some rogue person out there who's not paying attention. How are we really monitoring that those areas are allowed to regrow? In the time frame that we're considering to be regenerative and sustainable.

DR. UGARTE: I think you're referring to areas that are not under management. All our areas in Canada are under management, and the areas that we harvest in Maine as well. So there is no

NEAL R. GROSS

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

handshake in the harvest. We tell the harvester where to go.

Now, there are situations -- until recently the resource in Maine belonged to the state of Maine.

And now after the court case the resource belong to private owners.

It's much more difficult, the management now, because before we were dealing with sector. Now we have to deal with individual owners.

We ask permission. We talk to them, a permission. They say yes, you can harvest here.

We are applying exactly the same approach in each one of the small parts now -- it's complicated, but we are doing that right now because it's the only way to continue harvesting in those areas that we have been authorized.

And they are a very small unit. So we have to be very careful what we do there.

CHAIR BEHAR: And my last question kind of follows up, but it has another issue.

NEAL R. GROSS

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

If we look at doing an annotation how do we address the so many different seaweeds and the different unique needs of them including different regions that they're grown and harvested in an annotation that isn't as long as our current regulation?

MR. GRIGSBY: Well, I think that there would need to be additional guidance offered as well in addition to the annotation.

I think that you hit on the point of the difficulty of this specifically. Yes. I think that annotations have worked for other portions of the National List, some effectively, some not so much in terms of still leaving a gap in terms of consistency and interpretation.

So yes, I guess it's that do you require certification and set the precedent, or do you work with the National List and work with the annotation system.

And I wanted to just loop back if I can to your previous question. Raul mentioned in Canada and in Maine, at least in Cobscook Bay there

NEAL R. GROSS

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

is a management plan where the Department of Marine Resources issues lease areas that are specific to that harvester.

But the rest of the coast of Maine is not under that same management. And so that's what I was referring to with sort of the handshake agreements.

And I would also mention just sort of winter storms and ice scouring as well can also be in effect.

And so it is difficult to point blame on who did what. The Department of Marine Resources, they do receive complaints that they will follow up and investigate on as part of their jurisdiction in terms of somebody else potentially harvesting in an area that had been managed by a harvester for some time.

I mean, in a lot of cases some of these harvesters have been harvesting in these areas for 30-40 years.

CHAIR BEHAR: Great. I'll turn it over to Emily now.

NEAL R. GROSS

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

DR. SCHMIDT: Can I actually jump in on answering that question as well?

So one of the thoughts that Nichole and I had discussed around -- I think it kind of comes back to this idea of definition of kind of what does sustain mean and how would that look.

What we had talked about was looking at if you could define it as sustaining the biomass that would probably be broad enough to cover whatever species is being harvested.

I'm assuming not all of the species are being harvested here in the United States, right.

They're probably not harvesting 75 different species or whatever the list was.

And then as -- you could talk about biomass because that is a good metric for understanding the abundance of other dependent organisms.

So if you have a high biomass you're likely going to have a high abundance of other dependent organisms.

So it is a good way of kind of saying

NEAL R. GROSS

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

hey, this is representative of the ecosystem.

And then you could specify -- I don't exactly know how the government structure works here in terms of the regulations and everything, but you could then create rules for the different groups or different species similar to what we've done in Atlantic Canada where in New Brunswick they have one set of rules and then in Nova Scotia they have a different set of rules, but they all kind of are under the one umbrella legislation of the federal government.

So that could be one way of approaching that.

CHAIR BEHAR: Emily.

MS. OAKLEY: Thank you, Harriet. And thank you guys to all of you for taking the time out of your busy lives to present to us on this really complicated and controversial topic.

So I have a question for each of you.

And you actually just touched on my last question, but I'll come back to that issue of how do you create guidelines that could be effective across species

NEAL R. GROSS

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

and geographic regions.

So my first question is for Raul. We've heard a lot about ice scouring specifically with *Ascophyllum nodosum* as an example of the species being removed.

But isn't that a natural ecological process that's occurring as opposed to something that is human intervention in terms of harvesting?

Is it really fair to use that example, I guess, in terms of removal and the impact that it has on the ecosystem?

DR. UGARTE: I don't know if I can answer your question well. Is ice occurring, ice damage.

MS. OAKLEY: People are saying well, we're already getting removal of rockweed from natural events.

DR. UGARTE: Okay. So you think that it could be a community effect?

MS. OAKLEY: That's my question. Because that's a natural process. Rockweed developed and evolved in concert with those weather

NEAL R. GROSS

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

events although of course they are changing as --

DR. UGARTE: That is a good question indeed, whether this is a community effect or not.

But we have shown here that we don't make changes in the structure of the resource. Even though the harvest has been going on for 64 years.

Those events happen all the time. But Mother Nature recovers the resource quite quickly.

I mean, I show you that in six years after the total devastation there is a recovery there.

Now, the key in the harvest, in the management is just to operate under the level of natural variation.

And you have to consider ice damage as a part of natural variation.

So what happens in those areas that have been scoured. We basically close the areas until they recover totally. So you reduce your harvest.

So you work with those events. That way you need very extensive monitoring along the shore.

NEAL R. GROSS

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

You have to make sure that you are not over harvesting because the biomass was depleted by a storm or by ice damage. This is key in the monitoring and the level of sampling.

MS. OAKLEY: Thank you. So just a quick follow-up for you too then.

You were talking about biomass as a measure of recovery. And I know that Allison and Nichole talked on this too.

But you just sort of approached this. Is biomass sufficient to measure recovery in terms of other dependent species that rely on the seaweed that you're harvesting?

And so I was wondering if you could speak to that a little bit in terms of --

DR. UGARTE: Yes, of course. That's not the only parameter. We already show that we measure length plant and also the density.

And we have shown that those -- with the harvest as we do it there, that depravation rate you don't produce changes in length or biomass.

I have heard a lot that the management

NEAL R. GROSS

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

in Canada is only focused on biomass. That's not true.

The system as it's practiced considers also plant length and plant density. And we have shown that we haven't changed in years those parameters.

MS. OAKLEY: Thank you.

DR. PRICE: If we could jump in quickly.

MS. OAKLEY: Yes.

DR. PRICE: Allison and I had this debate even over breakfast this morning. And one other thing if we had gotten through all the slides we would recommend is also an intermittent sampling of architecture which is what Raul is hinting at there.

But I would point out that even some of these remote sensing options that we talked about, some of the optical ones, you can develop algorithms to look for architecture from those processes as well.

So I guess my point is that there are

NEAL R. GROSS

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

on the ground methods, or even aerial methods to maybe reduce expense and effort that could get you these data.

DR. UGARTE: I would like to add a little bit more. That is a very good idea indeed and we are starting to do that already.

So we are using LiDAR in drones. So we are developing that kind of pattern that you have along the shore in terms of habitat degradation. So if you want to talk to us we are pleased to talk to you about it.

MS. OAKLEY: So this is a question for Chris. Oh sorry, Allison, were you going to say something?

DR. SCHMIDT: I was. I was just going to say that the importance of also monitoring the architecture is because -- so the abundance of species, associated species can be linked to the biomass of the resource. But the diversity and composition of the community is linked to the architecture.

So they are two important pieces to

NEAL R. GROSS

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

monitor and that's why Nichole and I would recommend monitoring both.

But the architecture I think could be monitored maybe more intermittently than the biomass. I think that would be something that would have to be monitored quite regularly to make sure that that's being -- that it's being accounted for.

CHAIR BEHAR: Just to give you a time check we have about 10 minutes left. And Steve wants to ask a question.

MS. OAKLEY: Okay. They'll be super sort of quick. I only asked sort of one.

All right. So this is a question for Chris because we've grappled with ways that we might try to address any potential environmental impact of harvesting seaweed and looked at as everyone knows certification and annotation, as has been suggested by some the possibility of adopting third party standards.

But I don't think we really have the regulatory authority to require something like

NEAL R. GROSS

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

that.

And an annotation has come up by quite a few. But this is the same question I asked on the webinar.

I don't understand who would monitor and enforce an annotation which is what has brought us constantly back to certification because it's the tool that we have at our disposal that we know someone will actually go out on the boats at least once a year, will speak with the harvester, will look at their management plan.

Whereas an annotation, I don't know who would do that. Do you have any thoughts on that?

MR. GRIGSBY: Not specifically, unfortunately. I think that that is a similar challenge that we've in our discussions at MOFGA have come to as well is just that there -- the enforcement mechanism for that I think is a challenge.

I think that fortunately with the industry and the companies that we deal with directly there does seem to be a lot of voluntary

NEAL R. GROSS

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

management approaches.

But I think that the question that Steve asked earlier about the worldwide harvesting components. I mean that is a question for us as well.

I think we feel pretty good about at least the oversight in Maine both voluntary as well as from the governmental agencies.

Yes, I think that that is a very large question just given the amount that's harvested annually worldwide compared to what is harvested in Maine and even eastern Canada I think pales in comparison.

So I guess I don't know how that would be approached on a worldwide global level.

MS. OAKLEY: Okay. I'll just do one more question. So this is for both Nichole and Allison.

So we've heard some comments saying that we are putting the cart before us. For example, that we're assuming that by harvesting seaweed there is an environmental impact.

NEAL R. GROSS

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

And my response to that has been that yes, if you remove a wild native species from a wild native ecosystem especially in large quantities there will be an impact just as -- it doesn't matter what the ecosystem is. It will have an impact.

And our role here is to determine what is that impact and how can we mitigate against negative impacts in keeping with our standards.

So, my question for you is do you think that if we were to ask the National Organic Program to develop a task force of scientists that we could come up with guidance either species-specific, maybe triaging those at first that are most widely used, and then moving from there that would be meaningful and that would allow for assessment that we are following the standards of limited environmental impact.

DR. PRICE: It's a great question and the study that Chris mentioned earlier that's already happening in Maine that looks at harvested and unharvested areas and control spots in

NEAL R. GROSS

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

replication along the whole coastline is an example of such a task force program that could allow you to generate some generalizable impacts.

But we do agree that it needs to be a species-specific assessment. And at the very least we need to understand biomass assessments for these resources because we don't know if what is being removed is the equivalent of taking an ice cube out of the Arctic region, or is it the total deforestation that you can see in the Amazon.

What scale are we talking about here in terms of removal? We have to know the answer to that question.

DR. SCHMIDT: I also think that if you were to create a task force that would look at the species by species basis, that that would be a good approach to really try to understand what's out there already like she was saying in terms of biomass so that then we could or you could prevent the serial depletion of resources that we tend to see in scenarios where we don't have enough information about the resource and then just go

NEAL R. GROSS

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

out and harvest it anyway.

So I think that that would be a good idea to do that on a species by species basis. Like you said maybe start with the ones that are most harvested and then go from there.

CHAIR BEHAR: Steve.

VICE CHAIR ELA: I was struck by your data on aquiculture production of brown algae. Where you said 18 times greater than wild harvest.

Most of our questions have dealt with the wild harvest. But I mean where you said you think wild harvest may be less than 1 percent in 10 years.

Certainly we know with aquiculture of farmed salmon and some of these other species we potentially see some very deleterious environmental effects.

And so I would very much like to hear -- I mean if it's going to be almost the whole harvest maybe we're chasing down the wrong road here with talking about wild harvest.

I'm totally unfamiliar with

NEAL R. GROSS

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

aquiculture of seaweeds. Is it positive? Is it negative? Can you give some sense of what that means?

DR. PRICE: I can share with the panel a tech memo that I was a co-author on that we submitted to NOAA that is entitled something like Ecosystem Services of Seaweed Aquiculture.

That runs through one by one the positive and negative ecosystem impacts of seaweed aquiculture in tropical and temperate ecosystems.

But that is a large discussion. I'm not sure that we can answer all of those questions in the time remaining.

There are both to be experienced from seaweed aquiculture and on the balance it may be more positive than negative.

DR. UGARTE: Can I add a little bit about that?

Yes, aquiculture is an alternative, no question about that, for growing seaweed.

But there are seaweeds that you cannot grow in aquiculture and that is Ascophyllum.

NEAL R. GROSS

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

Ascophyllum, the properties that you get from that seaweed and use on the crops, it's because Ascophyllum is exposed to the intertidal, all these environments.

Due to the stresses Ascophyllum suffered, what creates the compound to allow the seaweed to defend itself from those stressors.

So you are not going to get that growing Ascophyllum as an aquiculture, in aquiculture system. That's impossible.

So you're going to lose the seaweed if you only go to an aquiculture approach.

And I would like also to mention if you have seen in the aquiculture within China I would like you to see in a photograph the impact that producing in -- because it had to be cultivated in shallow areas.

So I would like to see what is your opinion of the lobster harvesters on occupying those areas.

VICE CHAIR ELA: I appreciate -- I mean that was part of my follow-up question. I mean

NEAL R. GROSS

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

would say that we as a board need to -- should we be focusing more on the aquiculture?

I mean, you just said here's a species that aquiculture isn't really going to -- it's not going to be the same.

I mean, I'd say we would focus most of our attention on wild harvest and I wonder if we're just -- we need to be really focusing more attention on the aquiculture standards.

Do you have thoughts of which way -- I mean, given limited time, limited resources, limited brain power where do we -- where we put our time?

DR. PRICE: I would say that the price point required to keep aquiculture practices salient or solvent is higher than what folks are willing to pay now for a fertilizer product.

And we are not there yet where aquiculture species would be sold for fertilizer.

It may be a byproduct of leftover parts, but for now that is an expensive product that is sold for human consumption for the most part.

NEAL R. GROSS

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

DR. SCHMIDT: I would agree. I think just based on what Raul said in terms of some species can't be aquacultured, I think that there will -- even though wild harvest will only become 1 percent that just probably means that aquaculture itself has grown so much.

That doesn't necessarily mean that the wild harvest itself will decline that much.

I think there will always be space for a wild harvest so I think that that needs to still be considered.

CHAIR BEHAR: I have one quick question and then I go back to Emily. We have lunch coming up.

When you were talking about the free floating algae bloom and you were saying this is the new normal.

Is this like an effect of climate change? Is there actually a harvest of seaweed that could do something to mitigate the negative aspects and maybe seaweed could be a way to bring more balance to the marine environment, seaweed

NEAL R. GROSS

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

harvest? Can you speak to that?

DR. PRICE: I'll give my spiel, but I know that Allison has some examples too.

I think there's potential for that, yes. There's a study that came out I think last year from the UK looking at deep water reservoirs of carbon and using that same environmental DNA process I described and discovered that those systems are subsidized to a much larger degree than was previously expected by detritus of macroalgae.

And so there's a precedent for burying carbon in the form of kind of spent or senescent algae in deep water systems.

And removal of carbon and nitrogen phosphorus bound in those seaweeds to terrestrial systems, while that does not change the global carbon cycle it does remove that carbon from that space of water in that time.

So there's a couple of mitigation opportunities that might be interesting to consider.

DR. SCHMIDT: So from what I understand

NEAL R. GROSS

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

the reason why there's the big macroalgal bloom is sadly because of the deforestation of the Amazon rainforest and all of the nutrients from the farming and the deforestation running into the ocean.

And that has caused the massive bloom that has been starting, has happened since 2011.

It's a huge problem for tourism in the Caribbean, a massive problem. So there could be potential opportunity there to harvest some of those free floating seaweeds for production as fertilizer.

But I don't think that there has been anyone who has taken up on that opportunity as of yet.

I know that Mexico right now is just essentially trying to figure out what the heck they're going to do with it and building ATV parks with it.

There's definitely opportunity there for someone who has the equipment to do it.

DR. UGARTE: I can add a little bit because we have been approached by those countries

NEAL R. GROSS

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

there on how to utilize the seaweed.

One of the problems that you have with this kind of situation is that the industry requires constant supply. You cannot just get all the biomass at once that happens with this bloom.

So you cannot handle that amount of biomass at the ride to the shore because it decompose very quickly. So this is a big challenge for utilizing that resource that is fantastic, but it's difficult to handle.

CHAIR BEHAR: Emily, would you like to wrap it up?

MS. OAKLEY: Yes. So, I was just going to say yes, we are at time, but I know that Allison and Nichole, I just want to make it clear for the audience didn't meet until this morning but graciously agreed to work together via Google Docs I think to put their presentation together so that there was an overlap. And so met through this process.

And you didn't get to finish your final slides of recommendations which are sort of a huge

NEAL R. GROSS

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

key part of why we wanted to hear from you.

So I just wanted to confirm with Michelle that those will eventually be up on the website. And so stakeholders and certainly the board can go look at those to get more details about what you have recommended. And we will be doing that.

So thank you guys so much for taking your time and sharing your expertise and traveling from very far.

It is a huge commitment to volunteer time that you gave us and I am extremely grateful for it. So thank you very much.

(Applause)

CHAIR BEHAR: Thank you. Okay, we will recess now and still come back at 1:30 p.m. for lunch.

(Whereupon, the above-entitled matter went off the record at 12:07 p.m. and resumed at 1:33 p.m.)

CHAIR BEHAR: So we are going to move now to the public comment portion of this meeting.

NEAL R. GROSS

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

Public input is an essential part of the NOSB decision-making process. And be assured if you can't tell already that we do listen and depend on your ideas and suggestions.

Before I move on to public comment I have some ground rules and information.

The National Organic Standards Board conflict of interest policy can be found in our policy and procedures manual.

Prior to this meeting and every public meeting a spreadsheet of all the proposals and discussion documents is distributed to the board members.

They are then asked to declare any conflicts of interest in writing to the NOP. At this time no conflicts of interest were disclosed and in the interest of public transparency I ask now if any of the board members have any conflicts of interest on any of the items that are up for vote or discussion at this meeting.

Seeing none we will move on now. This conflict of interest policy covers the entire

NEAL R. GROSS

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

meeting and we will not ask that information again before each subcommittee discussion.

We have already held two public comment sessions in webinar conference calls typed format for the fall 2019 meeting.

All persons wishing to provide public comment sign up prior to the meeting and speaking slots are assigned on a first come basis.

When we hit our limit we put people on a wait list in case there are cancellations.

Comments are limited to one per person for each NOSB meeting. So if you spoke on the webinar then you cannot speak in person here.

We'll take as many written comments as you want to give us and sometimes we do get buried.

Proxies are not allowed. If we call your name and you're not in the room we'll try to come back to you if time allows.

We're going to try to have everyone who's on the schedule for today speak today to be respectful of your travel schedules.

We may end up cutting into some breaks

NEAL R. GROSS

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

or go a little bit late if we run long.

For board members and members of the public if you have to talk to someone next to you please take that conversation outside.

Everyone, board members and the public, please silence your cell phones and your computers now so that we can clearly hear the speakers who are providing comment without distractions.

You are allowed to take photos, but please do it in a way that does not disturb the speaker or the board and stay behind the table and the tapes there.

Each speaker has three minutes and there is a three-color timer up on the podium. It starts green when you start to speak, and then it goes to yellow when you have one minute left, and then to red when you're done.

There's also a clock in front of you that's a countdown clock. When the red light comes on and the beep starts you can finish that sentence, but please refrain from taking more time from that.

We have many speakers to listen to and

NEAL R. GROSS

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

only a limited amount of time.

We ask that commenters start with their name and their affiliation at the beginning of their public comment.

If a board member has a question about the affiliation of a speaker please hold that question until the end of the speaker's comment.

Once the commenter has completed their three minutes I will then ask the board members if they have questions for that individual speaker.

Individuals providing public comment to the board are asked to refrain from public attacks that might impugn the character of any individual.

If I hear that type of speech I will interrupt you and ask you to refrain from that activity.

If you have PowerPoints to provide to Michelle please get them to her before your turn at the podium, like a long time before your turn at the podium.

And also please adjust the microphone

NEAL R. GROSS

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

to your height and speak directly into it so we can all hear you.

I will call on the person who is to speak and then I will announce who's on deck. The on deck person will sit next to Michelle and please feel free to take one of the butterflies on the table and actually even during break you can go get your butterfly.

And there's some ribbon there and a scissors. So if you want to hang it around your neck you can do that too.

Okay. And Michelle, do you have anything to add to that?

MS. ARSENAULT: Just in case anyone notices this little microphone that's on the podium, that belongs to the transcriptionist. So you are being recorded by the transcriptionist. So don't worry about that.

CHAIR BEHAR: Okay. So first up is Jackie DeMinter with Aimee Simpson on deck. Your name and affiliation, please. Even though I know it.

NEAL R. GROSS

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

MS. DEMINTER: Good afternoon. My name is Jackie DeMinter, certification policy manager at MOSA.

We certify about 2,150 organic operations throughout the United States. I will be commenting on vaccines, paper pots and embryo transfer.

But first let me thank you for your service and hard work. All of us in this room are on the same team with the same overarching goals and MOSA appreciates the work you do to strengthen the organic standards and uphold the seal we can all trust.

We also appreciate the work of the NOP, most recently with their Organic Dairy Compliance Learning Center course, but also for the move forward with the origin of livestock regulation though we'd hoped for a final rule.

The dairy compliance course is exceptionally well done and articulate and it clears up a question we've heard among certifiers.

Can allowed temporary confinement

NEAL R. GROSS

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

reduce days grazed below 120 days. The NOP's answer is resoundingly clear throughout the course.

No. One hundred twenty days grazed on pasture is the regulatory minimum.

Thank you from all of the dairies MOSA certifies and from our staff for this absolute clarity.

I'll take a moment to summarize some of the key points that Dr. Tucker makes in her presentation.

Lesson two gives the clarification that 120 is not the target, it's the minimum. Declaring a selected 120 days is the pasture season is not compliant.

Temporary confinement does not affect the grazing season.

In lesson three the NOP said the NOP expects that certifiers are enforcing 120 days grazing on pasture as an absolute minimum for ruminant livestock.

And if an operation is dropping below 120 days due to temporary confinement then the

NEAL R. GROSS

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

certifier should issue a notice of non-compliance.

An operation with a grazing season of 120 days that removes cattle from pasture due to inclement weather for 3 days is not compliant since the regulatory minimum for grazing was not maintained, even though the reason for confinement is permissible.

The NOP makes it clear that for no reason may operations drop below 120 days. Thank you.

Moving onto NOSB documents. Vaccines.

We encourage the NOSB to give the NOP a final recommendation with a full set of resources for the recommended review process including a sample organic search form and a form for documenting GMO status.

Paper pots. We continue to support the listing of paper for use as a plant production aid.

Please recommend listing with review criteria that is attainable for the products on the market.

Certifiers can use some common sense

NEAL R. GROSS

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

when it comes to approval of paper that is entirely made of synthetic fibers as you've discussed.

We have not had this concern during review of any paper product we've looked at.

And last, we agree that embryo transfer is not an excluded method and that hormones should not be used with the recipient organic animal.

Again, thank you for your work and the opportunity to comment. I am happy to answer any questions you have.

CHAIR BEHAR: Jackie, I have struggled with the embryo transfer as far as not having hormones in the donor animal.

And I understand that the rule that we refer to is organic from last third of gestation.

And of course that donor animal would have been providing that embryo way before that last third of gestation.

But there are some epigenetic effects meaning that there can be some negative impacts on the offspring that have come from those hormones that cause super-ovulation in the donor animal.

NEAL R. GROSS

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

I just wondered if you had discussed any of that and if that affected your decision-making at all.

MS. DEMINTER: No, we have not discussed that and I don't know that it would affect our decision-making at all because of the last third of gestation.

And we can see embryo transfer in beef herds just the same today and it would be completely allowed. And there wouldn't be that regulatory requirement.

CHAIR BEHAR: Steve.

VICE CHAIR ELA: I have -- on the paper pots comment. Obviously we got to this situation because of some sort of fiber inconsistencies, and then you just stated that you think certifiers could easily see the difference between a synthetic paper pot with lots of synthetics versus not.

That confuses me a little bit. At what point do we cross too much synthetic fiber in a paper pot? Because they definitely have some. And we are very -- obviously by our questions we're

NEAL R. GROSS

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

not wanting to make an annotation that is like the biodegradable mulch, yet we also don't -- we know there are fully synthetic pots out there depending on the manufacturer.

So we're trying to get feedback where is that line.

MS. DEMINTER: My comment is referring to Harriet's discussion on the webinar comments about the 100 percent synthetic fiber-based paper pots.

I definitely think that we see the majority of the -- all products that we've looked at are primarily paper and the synthetic fibers are such a minute content.

I don't have an opinion on how much synthetic fiber should be allowed, but I would like to see a recommendation that would enable the products that are currently on the market and being used by our organic certified operations to continue to be used.

That is what I would base as like the goal. Whether or not there are 100 percent

NEAL R. GROSS

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

synthetic fibers in the pots is kind of confusing because cellulose itself isn't necessarily natural.

So when you say synthetic paper, paper is synthetic.

If we were to see non-biodegradable pots that were claiming to be paper I think we'd be able to determine that pretty quickly.

We want to see paper. That's ultimately what we are looking for.

VICE CHAIR ELA: So I guess my concern is that in the age where we're talking a lot about microplastics and the environment, and these fibers probably -- if they are non-biodegradable would probably fall in that category because the paper would fall apart and you'd have this little teeny plastic fiber potentially.

I mean I think that's where my head at least coming back to biodegradable standards that they at least have to be biodegradable if they're a non-paper fiber.

And certainly the Ellipot people are

NEAL R. GROSS

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

saying that cellulose-based synthetic fibers which are not paper but come from cellulose, that that's kind of important to them.

So we're just trying to wrestle with that. The discussion document was really to get feedback from the stakeholder community of what -- where our comfort level is. Thank you.

MS. DEMINTER: Definitely leave it to those manufacturers to discuss the biodegradability of their products.

CHAIR BEHAR: Thank you, Jackie. Oh, sorry. Ashley.

MS. SWAFFAR: So Jackie, on your other one on vaccines it seemed like your hesitation was that we didn't give you the tools and the resources for verification in this document.

Do you think that's something that could be coming from the ACA as a best practice document?

MS. DEMINTER: It could be. I just think that we need -- in order to move forward with a more robust review process we've got to be able

NEAL R. GROSS

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

to have those resources.

And it could be developed at a number of locations. But your job as the NOSB is to give the NOP a really robust recommendation, at least we think so.

And we would hope that you would give them a full set of tools that they could then move forward with to implement a standard or a rule.

MS. SWAFFAR: Yes and no. I mean, we do provide recommendations, but not always the tools to get there.

MS. DEMINTER: Very true.

CHAIR BEHAR: I guess I'd just like to respond to that in that many times when we try to have more uniform documentation, OSPs, field history sheets, certifiers are very tied to the work that they've done for building their own documentation.

And so we're a little bit hesitant to offer something and just figure that most people are going to go forward making it to fit in with the rest of their current system.

NEAL R. GROSS

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

We'll see. Maybe through our discussion I could add some things to the cover sheet with ideas for what needs to be in that commercial availability review.

MS. DEMINTER: It would be helpful.

CHAIR BEHAR: Asa.

MR. BRADMAN: I have a question. It's a little off topic from your presentation, but in 2017 MOSA noted that you certify hydroponic production systems.

And I'm wondering if since then -- I know there's an interest in standards related to that.

I've wondered if since then MOSA has made any attempt to develop standards, or has there been internal discussion about what would be appropriate.

Looking at your website and some of the featured production farms or systems I'm wondering if you have any comment on that.

MS. DEMINTER: MOSA did work with an unsanctioned ACA working group. A group of us

NEAL R. GROSS

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

certifiers got together and worked out a best practice document.

So for the certification of hydroponic operations. And we have fully implemented all of those best practices and then some of our own policy-making.

But we have a very robust and thorough set of policies for the certification of hydroponic or aquaponic operations.

Did that answer your question?

MR. BRADMAN: Yes. Have you ever submitted those best practice standards perhaps as comments to NOSB?

MS. DEMINTER: I believe the ACA best practice document -- well, the non-sanctioned ACA best practice document to be correct was submitted.

It is I believe available -- I'm kind of looking around because I wasn't the leader of the group, but I believe that we would be absolutely happy to share that as a set of standards that certifiers, at least some of us have aligned to.

MR. BRADMAN: Okay, thank you. I'll

NEAL R. GROSS

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

look for that. Thanks.

CHAIR BEHAR: Thank you, Jackie. Aimee Simpson up next, with James Yoder on deck.

There's also chocolate over there especially later on in the afternoon you might need it. And you can thank Christie Badger for badgering us to bring chocolate.

MS. SIMPSON: Hello. My name is Aimee Simpson and I am the director of advocacy and product sustainability at PCC Community Markets, a certified organic retailer and the nation's largest food market cooperative.

I'm going to take a minute, maybe two of my precious three to talk about a new rule recently issued from the USDA, but it does not concern organic, at least not directly.

The national bioengineered food disclosure standard. As most of you know this new regulation was issued in December of 2018 and its alleged purpose is to finally mandate GE and GMO food labeling.

Sounds pretty straightforward. Of

NEAL R. GROSS

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

course in speaking to a group who knows far better than most that the words "straightforward" and "regulations" do not often go in the same sentence.

I'm not going to get into the disappointing gaps and problems with this regulation of which there are plenty.

What I want to share is this. These are the slides showing what a food manufacturer and retailer such as PCC must evaluate in determining what foods should be labeled.

Here's the first, and another, and another, and another. We are a retailer who believes in transparency and we want to label GE products.

But after many hours of analysis, legal consultation and internal deliberations here was our takeaway on how we could fulfill our obligation while also providing the most amount of assurances for our consumers.

Organic. Organic is the only exemption provided in the statute that allows food producers to skip the majority of this process,

NEAL R. GROSS

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

but more importantly organic offers the clear line in the sand for our consumers. No GE, no gene editing, no exceptions.

It is this clear line that is yet another reason we support the important work of the NOSB in evaluating excluded methods and providing transparency on all facets of GE materials.

And if this is the robust dialogue then we support the continuation of that. But because there has been inconsistent messaging on the conversation as noted by Under Secretary Ibach we feel it is still necessary to emphasize that any dilution of this clear line is not to be part of the conversation.

We continue to support the clear existing standard of no GE in organic. Because when the lines are not clear the integrity and value of organic label becomes diluted which brings me to an issue where the line has become muddled and is impacting our ability to communicate the benefits of organic to consumers and lawmakers on

NEAL R. GROSS

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

a critical issue of our time.

Climate change and regenerative farming. When I get questions like these, do you consider regenerative farming practices as criteria. Are there any indicators I can look for as a consumer to help me choose producers who are farming in a carbon sequestering way.

Any producers who you feel are leading the way.

The clear line is not there. While I want to offer an unqualified response of organic, organic, organic, unfortunately there are too many exceptions to be able to sing the organic program's praises, especially concerning hydroponic and other container production.

This is an exception that is leaving organic behind where consumers and lawmakers are finally taking interest in how to address agricultural environmental impacts and where most organic producers should be leading the way and rewarded for their efforts over the past three decades and beyond.

We thank you for your work to keep

NEAL R. GROSS

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

defining the clear line that is organic concerning GE, but please know that for consumers and retailers it is imperative that you keep working to clarify where the line is updated. Thank you.

CHAIR BEHAR: Thank you, Aimee. Emily has a question.

MS. OAKLEY: Thank you for your comments on marine materials. Are you the right person to ask a question?

MS. SIMPSON: Yes.

MS. OAKLEY: So it seems that you are supporting organic certification of crop fertility inputs, but also would like to see guidance expanded beyond that to include the current uses of livestock in human consumption. Is that correct?

MS. SIMPSON: Yes. Our position on this is the fact that there is really no difference between what is being allowed on the inputs and then what is also being marketed to consumers as organic seaweed in the form of edible seaweed snacks.

And so I feel that -- we feel that if

NEAL R. GROSS

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

there's going to be a label on one that organic should have those standards in place.

And that because of what we learned especially after today they are one and the same.

So if we're going to be standing up for environmentally protective and ecosensitive and protective harvesting methods, or aquiculture growing methods, that that should be consistent across the board.

And we do not feel that it is the same as, say, soil amendments but it's more in line with GE corn and animal feeds.

CHAIR BEHAR: Dan.

DR. SEITZ: Aimee, as a member of a food co-op board of directors and being something of a grocery store junkie -- I probably go there two times a day -- I don't think I hear more comments about anything than whether we carry food that's free of GMOs.

And we have a food policy and sometimes people pull me aside and say how do you know that that particular product is free of GMOs.

NEAL R. GROSS

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

On the flight here on Alaska Airlines I saw that they had non-GMO turkey. I sometimes have seen non-GMO verified water.

So it's certainly out there now I think in the broader context.

I've never had a chance -- we're a very small co-op -- to actually survey our customers.

And I'm wondering if you have taken steps at PCC -- see, I don't know if I got the right number of C's -- has actually done studies about how important that is to your consumers as a core aspect of the products you carry and the organic standard.

MS. SIMPSON: We have not done a study on it, but I can tell you that I mean in probably a month we get at least five questions coming into our department on GE in some facet.

Mainly the emphasis being we don't want to see it in our products. We're concerned about even it being in compostable plastics. It's across the board that it's a very important issue to our members and so that's why it's also very important

NEAL R. GROSS

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

for us to have a very clear standard that we can point to because the rest of it is not entirely clear.

CHAIR BEHAR: Thank you, Aimee.

MS. SIMPSON: Thank you.

CHAIR BEHAR: James Yoder is next, and Christie Badger on deck.

MR. YODER: I'm James Yoder, a dairy farmer from Apple Creek, Ohio with Clover Meadow Farm.

So I have three different subjects I'd like to touch on.

The first one, I strongly support the proposed rule on origin of livestock and urge the NOP to publish a final rule as quickly as possible to prevent the continuous conversion of conventional dairy animals in organic herds.

The second, as a dairy farmer who experienced three pipelines across my property I would like to see the NOP give guidance to certifiers that they can use when pipelines cross organic farms, or when there is drilling for gas

NEAL R. GROSS

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

and oil on organic farms.

Things to note would be equipment cleaning, storing equipment off property overnight, and organic inspector not hired by the pipeline company to monitor activity and shut down work in wet weather, erosion control and precautionary steps to avoid compaction, and also tillage practices that improve the soil and minimize erosion.

And the third one would be as a dairy farmer I would also recommend increasing the 30 percent pasture rule for dairy and beef to at least 50 percent.

As a dairy farmer myself and talking to other farmers the 30 percent is very easily achieved. Across the board I've never talked to anybody that had a problem whatsoever achieving that.

And upping that, that would only help strengthen the organic label. When a consumer thinks organic they're thinking about cows on pasture.

NEAL R. GROSS

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

So I can answer any questions you have.

CHAIR BEHAR: Emily.

MS. OAKLEY: Have you personally experienced problems with oil and gas infrastructure on your own farm, or do you know of farmers in your area that have?

MR. YODER: Yes. I have experienced it myself with two different companies crossing my farm.

CHAIR BEHAR: Dave and Dan.

MR. MORTENSEN: In addition to the really helpful suggestions about how we -- what would be the things to focus on if we were to pursue this, how has such development affected your and your neighbors' farming operations when it does go through?

MR. YODER: So, I would say compaction is a huge issue. When working on the easement two years later the soil, it gets rock hard on easement. Off easement no problem whatsoever. So soil compaction is a huge issue.

Erosion control, we had a huge washout,

NEAL R. GROSS

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

lost tons of topsoil, washed down into the creek and went down into the creek. I'd say those two would be one of the biggest issues. Thank you.

CHAIR BEHAR: So Dan and then Sue.

DR. SEITZ: So just to -- actually a follow-up on Dave's question. I don't know if you've had a chance to calculate the actual dollar amount due to these types of disruptions to your land.

And also has the development forced on your land in any way endangered your organic certification?

MR. YODER: It did endanger my certification. But in the agreement we had organic impact mitigation from OFA that we put into the agreement as preventive measures. That helped a lot.

I think it would help more if the NOP came out with a rule and we could use guidance from them.

But as far as affecting my certification, I didn't lose my certification but

NEAL R. GROSS

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

there's always endangerments.

DR. SEITZ: And if you have any ballpark figure of what it may have cost you to self-mitigate the problems?

MR. YODER: Just off the top of my head it's -- it run, I don't know, ten, fifteen, twenty thousand dollars.

DR. SEITZ: Thank you.

CHAIR BEHAR: Sue and then Ashley.

MS. BAIRD: Just a clarification, what you said. You said that you were working the easement. Is that still -- was that considered to be part of your organic operation, or is that an easement that they now own?

And I ask that because I've done inspections and it turned out that they were -- it was against the railroad.

And they were actually -- they had set their fences back into the easement which really wasn't theirs. They were just -- so I'm just asking the question.

MR. YODER: Right. So they don't

NEAL R. GROSS

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

actually own the property. They have a right of way that they come in onto.

So when I was referring to working, we have like pigtail posts with the electric fence.

I stick them in the ground so I can -- when sticking them in on the right of way I have to use a hammer and hammer them in. Off easement I don't even have to step on them. They sink right in there.

MS. BAIRD: -- if you will actually continue to farm something that they own.

MR. YODER: No.

MS. BAIRD: So I guess I have to repeat that. I was just wondering if you were -- I still didn't turn it on. Okay, thank you.

I was wondering if you were farming something that was considered to be their legal easement.

MR. YODER: No.

MS. BAIRD: Okay, thank you.

CHAIR BEHAR: Ashley and then Asa.

MS. SWAFFAR: So I just want to say thank you so much for coming and taking time away

NEAL R. GROSS

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

from your farm to give us testimony.

Do you feel that if you didn't have that mitigation document that your certifier provided you that you would have a greater potential for the utility company to come and contaminate your fields?

MR. YODER: Absolutely. Yes.

MS. SWAFFAR: Thank you.

CHAIR BEHAR: Asa.

MR. BRADMAN: I just wanted to ask the Program, maybe we should speak to the question of NOP guidance on this issue and the work agenda request on this issue.

DR. TUCKER: I think the Program is going to wait until after all the public comments.

There are a lot of people who are waiting and a waiting list so we're going to let everyone give their comments. Then we'll give a summary right before the break.

MR. BRADMAN: So I do have a question then related to this.

What kind of forum for information or

NEAL R. GROSS

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

education do you think would help farmers to respond to and address situations where there's unwanted or maybe not even necessarily unwanted energy infrastructure development on their farms?

MR. YODER: So, the mitigation plan we used from OFA was very helpful. I'd say talking to them, using that mitigation plan and adding stuff.

Legal, lawyers also helped give information about what you can and cannot do if that answers your question.

MR. BRADMAN: Thank you.

CHAIR BEHAR: So I live in Wisconsin which is right next to Minnesota where that mitigation plan kind of started and was very aware.

And I know of numerous people in my area that are using it. But I also know there's other places in the country that don't have access to that.

And I believe at the NOC meeting people were talking about the gas pipeline people or energy infrastructure, could be overhead electric lines.

NEAL R. GROSS

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

They're trying to get you to give them their easement. And they have a plan. And so it's always nice to have some information so you are prepared to say I'm okay with giving you this easement, but here's the list of things that you need to do when you're on my land.

MR. YODER: Right.

CHAIR BEHAR: And thank you also for coming. I'm sure this was somewhat of a burden.

MR. YODER: You're welcome. Thank you.

CHAIR BEHAR: Okay. Christie Badger is next. I hope you got some chocolate. And Dave Chapman on deck.

MS. BADGER: Okay. Hi, good afternoon. My name is Christie Badger and I'm speaking on behalf of the National Organic Coalition.

Thank you for your service on this board and for your commitment to organic integrity, and a huge thank you to all of you that worked really hard to get your materials published for a full

NEAL R. GROSS

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

30-day comment period. I really appreciate it.

I'd like to make comments on protecting transparency, accountability and public process, peer review, iodine and fenbendazole use in poultry.

In the interest of protecting transparency, accountability and the public process NOC requests that the NOP provide transparency regarding NOSB work agenda items that have been removed from the work agenda without explanation.

In addition, the NOSB should request that the NOP provide an update on all previous recommendations made and a rationale for the lack of NOP action on those recommendations.

USDA has exerted undue and inappropriate influence on the recommendations of the NOSB by prohibiting the board from advancing recommendations that were inconvenient in some way for the agency.

We urge the board to reject the undue and inappropriate influence of the USDA that denies

NEAL R. GROSS

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

the NOSB and the public their due rules in setting organic policy.

Peer review. NOC urges the NOSB to call on the USDA National Organic Program to make public the results of all peer review audits.

The peer review process under the Organic Food and Production Act, National Organic Program procedures and the Federal Advisory Committee Act requires disclosure of the full peer review report.

In its detailed document published in 2016 the NOP clearly outlines that the peer review panel report will be posted to the NOP website.

However, according to a letter dated October 22, 2019 from Dr. Tucker to the National Organic Coalition that NOP has, quote, "intentionally decided not to release the full report," end quote.

This is not acceptable. Integrity of the label requires transparency at all levels.

Iodine. NOC agrees with the comments that iodine is important as a teat dip. However,

NEAL R. GROSS

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

it's time for the organic standards to catch up with what industry already requires. No NPEs and iodophors.

We encourage the subcommittee to add a work agenda item for an annotation to prohibit the use of NPE forms and iodophors in organic production.

Fenbendazole used in poultry. NOC opposes the use of fenbendazole in poultry as proposed.

CHAIR BEHAR: Would you please finish your sentence?

MS. BADGER: The NOSB cannot rely on a 2015 TR covering parasiticide used in mammalian livestock to support a decision to allow the use of fenbendazole in poultry.

We recognize that fenbendazole is already permitted under restrictive conditions for other livestock species and it is permitted with a withholding period as appropriate for each class based on the residue present in the organic product, whether it be wool or milk.

NEAL R. GROSS

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

Residues of fenbendazole will be present in eggs and this requires a withholding period as consumers of organic products expect there will be no chemical residue in their organic foods.

CHAIR BEHAR: Ashley.

MS. SWAFFAR: So I have two questions.

First on the iodine. We did talk about that in subcommittee on doing the annotation.

One of the questions we put forward was is there enough supply without NPEs. And I didn't really see a whole lot of that in the comments.

So that would be very helpful to us on the board is to know if we put that annotation forward that dairy producers can find the teat dips available in quantity.

So if we can get that information to us then that helps us decide whether to move forward with that annotation.

MS. BADGER: I'll just let you know, Ashley, and we can get some more detailed information on that.

NEAL R. GROSS

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

We did reach out to NODPA, WODPA, certifiers and some industry folks. And they all told us across the board that -- like the certifiers responded our producers are already required this on the whole by their milk companies.

They're finding it fine. But we can look for that. Thank you.

MS. SWAFFAR: And then on the fenbendazole. The other species that currently are allowed to use fenbendazole have a withholding time and that's set forward by FDA.

There's no withholding time from the FDA for eggs. And how should we go about that as an NOSB when the science says that it's safe? How should we approach a withholding time if we do?

MS. BADGER: I think there are other products -- I'm going to yell Terry Shistar, help me.

But from my memory there are other products that have no withholding period. For example, I'm falling short. Terry, help me. It's to help animals with pain. Thank you.

NEAL R. GROSS

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

But we still require a withholding period on milk after use.

MS. SWAFFAR: Based on what science?

MS. BADGER: I'm sorry, but the NOP does.

MS. SWAFFAR: Yes, but I'm just saying there's no like actual science there that says that that's the correct withholding time. So how can we --

MS. BADGER: I'm not sure. I'd have to look into that more, what it was based on. I will --

CHAIR BEHAR: I was in the room when it was voted upon however many years ago. There was known residue to a certain amount of days and so the NOSB went beyond that just for safety's sake to make sure that there was no residue in the meat.

So they went beyond what the FDA requirement was for safety. So it was somewhat arbitrary, but it was meant to give a buffer beyond the current withholding. Emily.

NEAL R. GROSS

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

MS. OAKLEY: So in that spirit if there are known residues in eggs -- I'm not on the Livestock Committee -- how would you address trying to determine if there should be a withholding period and how long it should be for eggs?

MS. BADGER: There are residues in eggs.

MS. OAKLEY: I meant to say that. Did I say not? I meant to say there are. My brain just had a little switch, but there are residues. Sorry.

MS. SWAFFAR: I think that's more of a subcommittee discussion question, not for public comment.

CHAIR BEHAR: And just to note the Livestock Subcommittee did request a TR for fenbendazole in poultry to help us through this question.

MS. BADGER: Thank you.

CHAIR BEHAR: So you were clairvoyant. Okay. Next up is Dave Chapman with Megan DeBates on deck.

NEAL R. GROSS

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

MR. CHAPMAN: I'm Dave Chapman, Long Wind Farm and the Real Organic Project. Hello, friends.

I want to bring up a few things I'm concerned about. In the recent hearings where Under Secretary Ibach was asked why the NOP hasn't acted on the last 20 NOSB recommendations he avoided the question twice and the third time he replied that he was looking forward to choosing new NOSB members.

And I thought that was a very ominous thing. So use your time well. Keep working to protect organic even after you've left this board.

You have a microphone, please use it. You're meant to represent us, the organic community, not the USDA.

Five years ago, maybe six now the USDA lectured the NOSB. None of you were on the board at that time. But they put the previous 15 people in a room and told them that they must walk the line. And I'm asking you please don't walk the line.

NEAL R. GROSS

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

The question on the use of prohibited pesticides in greenhouses, tunnels, warehouses and shipping containers is an important one.

I still don't understand the clarification this morning. I tried. I don't think it's complicated.

I've talked to a number of people who also didn't understand the clarification. It's a simple question. Does the three-year requirement on transition include these indoor food production facilities. And I hope that could get cleared up today.

I'm also concerned by Jenny's comment this morning, Dr. Tucker's comment that certifiers who are unwilling to certify hydroponic will be brought into line.

This is not a settled issue and I think trying to force it into being one is not going to be a good direction to go.

In organic certification the largest hydroponic producers insist that they are not hydroponic. The largest CAFO producers insist

NEAL R. GROSS

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

that they are not confinement operations.

We know that this is not true. The question is what do we do about it. Do we quietly surrender the soul of organic?

So ending on a positive note for Phil LaRocca because I promised I would I'm very excited about the growth of real organic farming in America.

Millions of people are hungry for the amazing food that we are growing so let us celebrate that wonderful movement. Thank you.

CHAIR BEHAR: Emily has a question.

MR. CHAPMAN: Yes, Emily.

MS. OAKLEY: Well, this is a question for the Program. Sorry. I won't ask it again.

Since there is still confusion on the greenhouse or indoor facility question and I still didn't understand myself from this morning are greenhouses required to go through the three-year transition period for those facilities and the land that they're on?

DR. TUCKER: I'm going to stick with what I said earlier and at the end of the public

NEAL R. GROSS

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

comment period I'll be happy to say something on that.

CHAIR BEHAR: Dan, or Dave first? Dave, and then Dan.

MR. MORTENSEN: Dave, this is I think the third meeting I've heard you ask folks on the board and probably people in the room to exercise their voice given the position that they hold.

Could you give us two or three examples of what you're thinking about?

MR. CHAPMAN: As I've been involved in these conversations for the last five or six years I have felt a constant pressure not to speak out for fear of damaging the organic brand.

And it has been my belief that not speaking out will do greater damage than being silent. That being silent will do greater damage than speaking out.

We need to be talking about these issues. We need to welcome -- I can't remember the phrase this morning -- a brisk dialogue.

It needs to be public and we need to

NEAL R. GROSS

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

be able to disagree with each other. I think that these are big issues.

So examples of people who have spoken out, well, Jacksonville was a great example. We had over 60 farmers who came to the meeting. I couldn't get any farmers to come to this meeting. But we got 60 farmers that time.

Many of them were former NOSB members and I think we had a couple of former chairs too.

And they did speak out. And they did not sway very many people, but certainly they represented a large slice of the organic community.

CHAIR BEHAR: Dan.

DR. SEITZ: So Dave, I definitely agree with you that the organic law really doesn't provide a basis for hydroponics.

But we now have a situation where that is being allowed. And we heard from one certifier that certifiers have come together to develop best practices in that area.

The NOSB hasn't addressed this issue. And I'm just curious from your standpoint of

NEAL R. GROSS

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

looking at the hydroponic industry what are you seeing as disturbing practices potentially because we don't yet have a set of standards for even regulating the hydroponic industry.

And I don't know if that's something that you've looked at or not. What might be some of the outliers in terms of practices out there for lack of standards?

MR. CHAPMAN: I think obviously practices like the use of glyphosate before putting the pots down was a strong example that I brought up not to this group but in public. And that's been ended and that's wonderful.

My goal is not to reform the hydroponic container standards. My goal is to remove them.

I don't think they belong in organic. I think hydroponic production is just fine. They should come up with a label.

I guess, I honestly, Dan, I'm the wrong person to ask about that because I just don't think it belongs any more than CAFO egg production does not belong in organic.

NEAL R. GROSS

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

So if we try and think what would be better CAFO egg production I think we're missing the question.

DR. SEITZ: Thank you.

CHAIR BEHAR: I just have a question. How many producers are Real Organic Project certified?

MR. CHAPMAN: Real Organic Project is about 200 right now. We're growing quickly. I think we will hit 400 by April.

CHAIR BEHAR: And everyone has to be NOP certified before they get --

MR. CHAPMAN: Absolutely. And just to say the good news, more good news for Phil is we've brought at least two farms back into USDA certification that had left in dismay. And they're now certified again because they wanted to get certified with the Real Organic Project.

So we can say that we are working together to build up the Program which is the intention. We're not trying to destroy the NOP, we're trying to bring it back home.

NEAL R. GROSS

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

CHAIR BEHAR: Thank you. And I enjoy those farmer videos, especially when it's people I know and like.

MR. CHAPMAN: Well, in a week or two we should have Jesse's out. Thank you very much.

CHAIR BEHAR: Thank you. Next up is Megan DeBates with George Seaver on deck.

MS. DEBATES: Hi, I'm Megan DeBates of the Organic Trade Association.

So first I want to comment on origin of livestock. OTA worked to get language secured in the House and Senate appropriations bills directing a final rule.

We are pleased to see action on this by the National Organic Program. Since the proposed rule originally was published in 2015 any final rule should be immediately effective and implemented.

The final rule must also include the policy in the original proposed rule from 2015 that limits the allowance for transitioning dairy animals to organic milk production as a one-time

NEAL R. GROSS

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

event.

I also want to comment on the enforcement rulemaking. So again OTA and other stakeholders in this room spent nearly three years working with Congress on the provisions in the Farm Bill related to enforcement and oversight.

A 60-day comment period over the holidays is not sufficient. It is important to get this piece of the Farm Bill implemented promptly, but we also need to make sure we get it right.

This will also likely be the largest rulemaking issued by NOP since the organic regulations were first implemented in 2002.

So stakeholders should have sufficient time to prepare substantive comments.

We plan to request an extension because we believe at least 90 days will be necessary.

And lastly on continuous improvement.

We recognize the important work the NOSB does to come up with recommendations for organic standards.

A large majority of the challenges we

NEAL R. GROSS

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

struggle with are a result of not having standards.

And for many of those same challenges we have NOSB recommendations to address them.

However, organic is unique in that it is a voluntary regulatory program and it should be treated differently by the federal government than the lengthy process that mandatory regulations go through.

We are working with Congress on bipartisan legislation to address this issue and we look forward to elevating the great work that the NOSB does as well as the National Organic Program by improving the process by which organic standards move forward. Thank you.

CHAIR BEHAR: Thank you, Megan. Next up, George Seaver and on deck is Terry Shistar.

MR. SEAVER: Hi. My name is George Seaver. I've been processing rockweed on the coast of Maine for 42 years.

Hearing the discussions this morning I'm going to go off script which is a bad idea, but we heard a lot about a lot of different seaweeds.

NEAL R. GROSS

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

And rockweed, *Ascophyllum*, is the one that I personally have been involved in. And it's worth mentioning that the two basic things that happen to harvested rockweed are you can dehydrate it into a meal which is either in a fertilizer or a feed supplement, or you can do a liquid extract of it.

The amount of seaweed you need to make liquid extracts is much, much less than granular. That's just important background I think.

Some additional perspective. We've heard anywhere from 3,000 to 5,000 miles of Maine coast. Only a relatively small fraction of that coastline is a good place to harvest commercially for logistical reasons or whatever it is, distances. But it's a small percentage of the coast that actually is good to harvest on.

Around 2004, however, after decades of commercial harvesting a lady raised a reasonable question. Is commercial rockweed harvesting damaging to the coastal ecosystem.

She presented it as a question but

NEAL R. GROSS

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

framed it more like a conclusion. And we've been in a difficult debate ever since on the coast of Maine.

At the time several rockweed processing businesses had been confidently returning to the same ledges for decades, literally decades.

It was well established that the beds were more than capable of producing the needed rockweed.

Our people in the water were knowledgeable of the areas that we were visiting and while focused on the rockweed were aware of the areas and knew that there were no changes going on.

During the years since she first raised those concerns her position in public presentations have continued to confidently assert still with no supporting evidence that the ecosystem would soon crash if we continued to harvest seaweed. Again, very problematic from a business of a commercial endeavor.

The total commercial harvest is

NEAL R. GROSS

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

calculated to be about 2 percent of the standing biomass. And in contrast to the message often presented the total harvest for Maine waters has grown quite slowly in the past 40 years.

Rockweed harvest data has been required by the Department of Marine Resources since about 2008.

The average increase per year has been about 13 percent. And it's pretty consistent, 13 percent.

While there have been ecological changes due to ocean acidification, rising sea temperatures, rising sea levels, invasive algae, fish, shellfish, increasing populations of seals, eagles and other climax predators and the rise and fall of other fish stocks there have been no discernible or asserted changes that could logically be associated with harvesting rockweed.

I would love to answer questions because I've got another quarter page that I'd love to cover.

CHAIR BEHAR: Sue, and then Emily.

NEAL R. GROSS

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

MS. BAIRD: I like to see quantifiable and you're telling me that you're sure there's no changes. So how are you quantifying that there are no changes?

MR. SEAVER: Probably the best way because you're obviously right. It is -- my background is engineering. It's impossible to prove a negative. So no one can prove that there's been no changes.

So the best yardstick we have is the Department of Marine Resources is monitoring all of the interdependent fisheries.

Acknowledging that human beings have an impact on the planet the impacts that matter the most are the ones that affect our immediate lives first with no doubt.

So with respect to all the other fisheries there's been nothing even remotely apparent.

And again it's very important to get this whole thing in perspective. It's a very small percentage of the coast that's even harvestable.

NEAL R. GROSS

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

So with respect to the total ecosystem, the total coastal ecosystem and the fact that harvesting is hard work so you don't do it unless it's easy you go to the areas where there's the most seaweed, and you probably know about them because you were there three years ago.

And at that you're interfering or impacting just a very small bit of the coast. So the impossibility of proving a negative, long answer. The impossibility of proving a negative is part one.

The other thing we do have as a matter of fact, and it's on a slide that you're not seeing, is there's one particular company in mid-coast Maine that has been harvesting for 40 years. They make a horse feed supplement.

And they know where they've harvested.

They've got extremely good records, 40 years of records of where they've harvested and where they haven't.

And there are people going back to those areas so they can compare all the other life bits,

NEAL R. GROSS

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

critters they're often called, other related organic material, living things. I'm trying to get a category here.

We have this really incredible database if we wanted to do it, and we have some people doing it already where we can go to areas that have never been harvested and compare them to areas that have been harvested regularly for 40 years.

Well, we've tried to get more people to do it but we haven't -- it's going to be expensive.

There's some private researchers are doing it associated with the University of Maine.

The University of Maine has got a lot of really good people.

And we aren't doing this thing like outlaws. We've been working closely with the DMR for years.

I was going to refer to the letter we've got from the Department of Marine Resources that I just asked for a few days ago about the nature of the complaints they've received in the last 40

NEAL R. GROSS

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

years.

They had records for the last two years handy. They gave me two years' worth of information.

There were 32 complaints from people about harvesting. Thirty of them were people who didn't really want to see anybody harvesting, just territorial feelings.

Two of them were about over-harvesting, and one of the two was actually over-harvesting.

The other one was not found to be over-harvesting.

And the one that was found to be over-harvesting, or mis-harvesting, there was a machine that was set wrong and they fixed it. So it's being observed and being acted on and being fixed.

It's all being regulated and managed.

And again, it's almost a trivial percent of the resource at this point.

CHAIR BEHAR: Emily.

MS. OAKLEY: Thank you for coming to speak to us. It seems from your testimony both

NEAL R. GROSS

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

written and oral that you are supportive of the current rockweed harvesting methods.

So I'm wondering if you feel that organic certification is a viable option. Would it just codify the good practices that growers are already using?

And do you feel that it's a viable option?

MR. SEAVER: You're now going to learn my ignorance of this process.

If what you're saying is should seaweed extract be -- is that an appropriate input to organic production the answer would be yes.

If you're asking do we have to know the history of where that seaweed has been while it was still in the water that's a whole different thing.

It's another tidbit of perspective here. We make biostimulants, liquid extracts that go on agricultural crops. Typically the application per year is about a gallon per acre. That's 10 pounds. And this is after it's been

NEAL R. GROSS

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

through a heating extraction process.

So the impact to the earth, to those acres from the liquid extract is -- you can hardly compare it to fertilizers.

MS. OAKLEY: So I'll just clarify. The discussion isn't about whether or not to remove seaweeds as a use for crop fertility inputs, but whether or not to try to find a means of verifying minimal or limited environmental harm in the harvesting of them.

And so we've explored different options. Requiring organic certification of the harvested seaweed.

So you as the processor would receive certified organic harvested seaweed. And you would receive a certificate from the harvester or the harvesting company that contracted with the harvesters and then would put that into your product.

MR. SEAVER: It could be done. It would be something we've never needed to do.

We've never tried to sell organic

NEAL R. GROSS

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

seaweed meal. That's where that is normally a factor which goes out in hundreds of pounds per acre.

The liquid extracts makes -- could be done, but it would just be -- it almost seems irrelevant at the application rates. And it's the same seaweed floating in the same bay.

CHAIR BEHAR: Thank you. Oh, I'm sorry.

MS. BAIRD: I wanted to follow up. You said there were 30 complaints and 1 of them was found to be -- but 30 complaints on what number of harvesters or harvested product was out there?

I want to know if there's 30 complaints was there only 32 harvesters, or were there 600 harvesters? That means nothing without some context.

MR. SEAVER: Okay. There's about 100 seaweed licenses. We get all of our products through four people with boots and machetes and hand harvested, just again for perspective.

The complaints that the Department of

NEAL R. GROSS

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

Marine Resources received are from landowners about somebody and we don't know who, I don't know who, harvesting there.

They might have been harvesting with a machine. They might have been harvesting with a rake. But the complaints, the point of the -- and there's a letter from the Department of Marine Resources that's in the system now.

The complaints were that somebody was harvesting it all because there's this territorial about whose seaweed is it. You've heard some other --

MS. BAIRD: So are you saying then that the complaints were somebody was trespassing on their land to harvest?

MR. SEAVER: No.

MS. BAIRD: No. Because that's what it sounds like.

MR. SEAVER: It's a big question. There was this court case -- since 1820, and I could read you the statute, the people of the state of Maine have been the owners of the rockweed and the

NEAL R. GROSS

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

intertidal zone for the purpose of fishing, fowling and navigating. This is what King George thought was a good idea.

Recently in spite of what is currently on the books in Maine law there was a ruling that's quite in contrast with what's still on the books as a law about who actually owns the seaweed and what it means to own the intertidal zone.

So during that time period there were people who thought they were trespassing. Right now if someone complains half of the legislature will think they were trespassing and half will not.

So I would answer not trespassing, but interfering with the view. There's a gentrification process on the coast of Maine that would make old guys get mad.

MS. BAIRD: Thank you for that clarification.

CHAIR BEHAR: We're going to move on.

MR. SEAVER: Can of worms.

CHAIR BEHAR: Thank you. Yes. So we

NEAL R. GROSS

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

are 20 minutes behind. Just thought I'd let everybody know.

Terry Shistar is next with Kiki Hubbard on deck.

MS. SHISTAR: Okay. My name is Terry Shistar and I'm on the board of directors of Beyond Pesticides.

As you probably know we have a new project focusing on organic integrity. Board members with expertise in many areas guide us in efforts to promote organic practices.

We've submitted comments on all of the issues before the board at this meeting.

A few days ago I work up around 3 o'clock in a dream set in a landscape of ecological collapse. That's all I remember about the dream, but a message was running through my head and I couldn't sleep until I wrote it down.

In a world in which agriculture focuses on a few profitable genotypes of a few species it's increasingly the responsibility of organic producers to maintain the diversity both cultivated

NEAL R. GROSS

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

and wild that's needed to sustain life on Earth.

I fell asleep again wondering how to work that into my three minutes in Pittsburgh. Here it is.

Just as the agricultural economy is structured by big business to limit the choices of organic producers, the NOSB exists within an agency that is promoting a get big or get out monocultural view of the world.

The authors of OFPA foresaw this problem and gave the NOSB broad authority to provide USDA with leadership and guidance in understanding what organic means and ensuring that the National Organic Program protects and promotes the organic vision which is perhaps our best chance for preserving biodiversity.

The NOSB represents the organic community. You're responsible for upholding integrity in the face of political pressures on USDA.

You must maintain consumer confidence in the organic label.

NEAL R. GROSS

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

In order to do so you must maintain control over the NOSB work agenda. You must ensure that the diversity of your opinions comes out of subcommittee by making use of minority positions.

You must ensure continuous improvement by addressing difficult issues like hydroponics and container production, contaminated inputs, excluded methods terminology, fermentation products, marine materials, sanitizers and inert ingredients.

You need to speak up when USDA fails to base its National List on NOSB recommendations or fails to complete the process by following through with regulations.

We've submitted specific comments in writing, but don't forget. Take celery powder out of organic meat. The need for synthetic methionine as a result of choices regarding breeds, stocking rates, both density and group size, and outdoor access.

Increasingly consumers are turning to eggs and meat produced in pastured poultry systems

NEAL R. GROSS

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

which require fewer synthetic inputs.

There have also been advances in the use of insects, specifically black soldier fly larvae as a source of natural methionine. Thank you.

CHAIR BEHAR: Ashley is thinking about a question.

MS. SWAFFAR: Hi Terry. Thank you for your comments. They are very detailed and we do appreciate the work that you put into them.

I do have a question on methionine. Surprise. So you had put in there that methionine is not necessary because the European Union doesn't allow for methionine. Kind of saying like that's the reason why we shouldn't have it either.

But they are also struggling there and they only require 95 percent of their diet to be of organic grains and the other 5 percent is to make up for the shortage that they cannot get in their diets from synthetic methionine.

MS. SHISTAR: It's not to make up for synthetic methionine, right? That's not specified

NEAL R. GROSS

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

in the regulations.

MS. SWAFFAR: That's what poultry folks say. And that's still allowed till the end of 2020.

Do you -- would you like to see something like that? If we were to do away with synthetic methionine and allow 5 percent non-organic.

MS. SHISTAR: You know, I think that if the poultry practices were similar to those in Europe where poultry got 23 and a half square feet per bird when they were outside and there was an emphasis on smaller birds that took longer to reach maturity and so forth.

I think that after adopting those then we could talk about whether there was a need for synthetic methionine, or using other kinds of feed materials.

But I think that until we get to that position it's premature to talk about that.

MS. SWAFFAR: So we still need it until we get to that position? Is that what you're

NEAL R. GROSS

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

saying?

MS. SHISTAR: No, that's not what I'm saying.

MS. SWAFFAR: The 23-24 square foot outdoor area. What do you -- if a bird had that much area and you think that they could get their methionine from the outdoors what do we do in the winter? What do we do in areas of the country where it snows a lot and there's no bugs, no grass?

MS. SHISTAR: You know, if there are areas, if there are places, if there are conditions in which synthetic methionine is actually necessary then you can annotate the listing of synthetic methionine to be restricted to just those times.

CHAIR BEHAR: Thank you, Terry. Next up is Kiki Hubbard with Jaydee Hanson on deck.

MS. HUBBARD: Good afternoon. My name is Kiki Hubbard and I'm the director of advocacy for Organic Seed Alliance.

I want to thank the board and the NOP for all your hard work and for your commitment to this important public process.

NEAL R. GROSS

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

Today my comments will touch on two agenda items, excluded methods and genetic integrity.

On the topic of excluded methods we very much appreciate the NOP statements this morning underscoring that gene editing is indeed an excluded method.

And we're happy to hear that there is no plan to change the excluded methods definition.

We should consider this case closed and move on to other methods in need of discussion.

On the topic of genetic integrity we can all agree that this continues to be a problem that is complicated and a risk that can't be ignored.

As discussed at the spring meeting in Seattle OSA committed to conducting a survey of companies supplying organic field corn seed to better understand the benefits, practicality and potential pitfalls of the subcommittee's previous approach to fostering transparency.

Our response rate was very good. The

NEAL R. GROSS

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

seed suppliers responding represent seed planted to more than 70 percent of organic field corn acreage.

We collected a lot of data. And I want to run through just a few takeaways. You all have the full set of data in the comments.

One important finding is that the seed companies we contacted understand well the importance of genetic integrity to the organic customers, saying that it's extremely important or very important to offer hybrid seed corn with no or very low levels of GE Mt.

And the vast majority of these companies, 86 percent are also providing detectable level information upon request to these growers though the vast majority of companies we contacted did relay serious concerns with the 2018 proposal that we asked them about.

And we believe this is because currently requests for detectable level information currently makes up a small percentage of their customer base with 92 percent of companies

NEAL R. GROSS

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

responding saying that requests make up between 5 and 20 percent of their sales.

Companies are spending considerable amounts of money on testing as you can see on this slide, and most say that their business has been financially harmed due to contamination, but that they have no recourse for recouping these losses.

What we were most excited to see in this survey is that most of the companies responding are willing to share testing data with an independent body of experts under a non-disclosure agreement to help the organic industry better understand the state of contamination to inform what, if any, policy solutions are available to us right now.

So that's why we encourage swift action on NOSB's ongoing request for a USDA task force or some independent third party body of experts to collect this comprehensive baseline data in a way that is systematic, scientific, to help us inform this area of policy.

Our survey shows that most seed

NEAL R. GROSS

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

companies are ready to cooperate in this effort.

Thank you.

CHAIR BEHAR: Dave.

MR. MORTENSEN: Kiki, you mentioned that companies, 86 percent are willing to share the data if asked about the data, and that a small fraction it sounds like, 20 percent of the farmers are asking for the data if I understood your report there.

Why would a company not want to share the data? And why would it be that it would only be shared upon request?

Like if they have the data and farmers are buying their seed and planting it and selling the harvested crop what would be the reason not to just openly share the data with the farmer? I'm curious what the companies are saying.

MS. HUBBARD: So it's a great question and the context in which we asked the question is really important.

And per the proposal from 2018 we asked what, if any, negative impacts would result if all

NEAL R. GROSS

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

organic field corn growers were required to document detectable levels of the seed they're purchasing and planting.

So it's that moving from 5 to 20 percent of requests, or providing it to 5 to 20 percent of their customer base to 100 percent, that seems to be the problem.

And the problems they communicated, just reporting on the data. We for the record are not a seed trade association.

But per our survey findings the concerns are that more than half of the companies responding say that such a policy if implemented at this time would result in higher production costs which would be passed on to organic growers in the form of higher seed prices.

We already know that's a deterrent for some organic seed sourcing even though it's not an allowable reason to source conventional untreated seed. But that price would be passed along per the seed companies' comments.

Furthermore these seed companies,

NEAL R. GROSS

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

again more than half of them reported that they would likely invest fewer dollars in organic seed production because it's more expensive.

And in that way the organic seed companies responding to the survey indicated that they felt they would be put at a disadvantage, especially compared to -- a disadvantage to the largest genetic suppliers supplying conventional untreated seed. Again, at least in hybrid field corn seed.

So it's that disadvantage to organic seed companies, potentially seeing fewer organic seed varieties in the marketplace at a time when we need more choice in organic seed, more genetic diversity.

This is also an organic integrity issue, the availability of organic seed.

All of those findings indicate to us that we just need to take a step back from that current approach that the Materials Subcommittee was headed in and ensure first and foremost that all affected stakeholders are at the table.

NEAL R. GROSS

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

And seed companies or organic seed companies in particular were conspicuously absent from these conversations in identifying policy solutions. So that is why we conducted the survey.

And moving forward I just think there's a real opportunity to bring together these seed companies with the customers they're serving, with organic farmers who absolutely need to be at the table. They absolutely deserve this information.

And perhaps with certifiers too to figure out the best path forward.

The last thing I'll say is I've seen a dramatic shift over the last decade in seed companies being willing to talk about contamination and to share information about contamination and to share that information with their customers. So I think we need to take advantage of that.

A lot of the companies I actually talk to, this survey was conducted electronically, but I did talk to some of the companies to give them a heads up it was coming.

And all the companies I talked to said

NEAL R. GROSS

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

hey, have the NOSB call us. We want to be part of the conversation.

And so I think there's a lot of potential moving forward in bringing them to the table as well as really pushing for that comprehensive baseline data set.

MR. MORTENSEN: I will just say that we did speak to seed companies. We didn't do a comprehensive survey, but it wasn't as though we were doing it in a sort of closet.

MS. HUBBARD: Fair enough.

MR. MORTENSEN: And I'm still personally not clear, and I support the idea of a task force by the way. I think it's a great idea, bringing the farmers and the seed companies together with folks from here and elsewhere.

But I still don't see where -- if 86 percent of the stuff has already been tested and the data is available I'm struggling to see where such a high cost comes in with just sharing the data on a tag, on a bag. But I'm not seeing that.

MS. HUBBARD: It's more complicated

NEAL R. GROSS

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

than it might seem.

CHAIR BEHAR: Sue.

MS. BAIRD: Would the organic seed companies rather see this expanded to do non-GMO seeds and/or conventional seeds as opposed to just targeting organic?

MS. HUBBARD: I did not ask -- we did not ask that question. We did not ask that question.

I believe any policy proposals moving forward should apply to both organic and conventional untreated seed.

We are absolutely not opposed -- Dave, if I can come back to your comment -- to exploring the feasibility of mandatory labeling down the road.

At this time again according to what we found and the context of moving from 5 to 20 percent of requests to 100 that seems to be an issue in terms of capacity and production costs.

But we are not opposed to moving in that direction by any means.

NEAL R. GROSS

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

CHAIR BEHAR: I have a question. So you have here that their businesses have been financially harmed due to GE traits found in advantageous presence.

And of course we know that farmers are also being damaged financially and more from cross-pollination that they didn't ask for or want.

So I'm just kind of wondering if there's been any discussion within the seed world of how -- what recourse might look like.

Because a lot of times it's kind of hard to get to where you want to be if you don't have a vision of what you want it to look like.

MS. HUBBARD: There have not been recent conversations. The most recent conversation that involved members of the seed trade was the AC21 work on biotechnology under the previous administration. Harriet, there hasn't been discussion as to what repairing that harm would look like.

CHAIR BEHAR: Do you know if any of them have moved away from doing organic seed production

NEAL R. GROSS

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

because of having GE contamination? Even though that wouldn't take away their certification, but that they became frustrated.

MS. HUBBARD: We did not ask that question. I have spoken with seed companies in the past who have, yes.

And those losses come in the form of really a commitment to protecting, wanting to protect the integrity of organic and conventional untreated seed by redirecting lots that exceed an internal threshold they have to a less lucrative market, to the conventional seed market and taking a big financial hit both in terms of production costs and then of course the premium price they can get.

And so that on top of the testing costs.

There's just a lot of risk right now especially for certified organic seed production.

Absolutely does not -- I don't want to minimize at all the financial loss to farmers who are also being harmed.

To that end I think it's important that

NEAL R. GROSS

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

data collection includes the entire value chain and not just seed because we know that's not the only route of contamination.

If you dig deep into the data you'll also see at what levels they're finding consistently.

I think we can feel pretty encouraged by the level of integrity being sold right now.

CHAIR BEHAR: Emily, quick.

MS. OAKLEY: Quick question. In reading your comments on the genetic integrity transparency of seed grown on organic land instructions to certifiers proposal it was not 100 percent clear to me exactly what position you were taking on that.

MS. HUBBARD: Sorry. We are supportive in this new direction. We appreciate the pivot to just -- yes, take this time to bring all the stakeholders together to consider a path toward perhaps labine (phonetic), perhaps other solutions available to us.

We are supportive of the instruction

NEAL R. GROSS

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

to certifiers. We did provide some suggested changes and want to be clear that our survey results only apply to hybrid field corn seed companies we don't know. And this applies to all crops with an at-risk -- that are at risk because of a GE counterpart.

Therefore that data can't be applied -- or it can't be assumed that companies are testing for all these crops, be it soybeans, alfalfa, yellow squash.

But yes, we are supportive of providing the information. Farmers should absolutely be encouraged and they should be told that this information is available for them.

In a way transparency does exist per our findings. And if we want to move in a different direction that might be more efficient in some people's view then we should talk about that.

CHAIR BEHAR: Okay, thank you, Kiki. Next up is Jaydee Hanson. Jaydee, there you are. And Nicole Dehne on deck.

And don't forget your butterflies. Or

NEAL R. GROSS

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

you can get one at a break.

MR. HANSON: Okay, I'm Jaydee Hanson with the Center for Food Safety. I'm happy to be here to present a few comments to you.

Thank you all for your work and your patience going through all of this.

On excluded methods the -- at the center we distinguish between induced mutagenesis arising from environmental stress such as heat, cold, radiation from induced directed mutagenesis that comes from genetic engineering or other forms of in vitro DNA and RNA manipulation.

I'd note that some of the people that want to do gene edited crops and animals say that what they're doing is just like mutagenesis and even more precise.

We disagree and believe that this needs to stay an excluded method, and that directed mutagenesis between the gene editing and other in vitro methods should be excluded and all forms of directed mutagenesis should be considered excluded methods.

NEAL R. GROSS

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

However, we would support future robust conversation on other kinds of mutagenesis.

Embryo transfer in livestock. Embryo transfer as typically practiced. This is not an economic conflict of interest I have, but I come from a long line of angus breeders on both sides of the family.

And one of my cousins is a practitioner of embryo transfer.

The embryo transfer as it is practiced requires the cow that is the source of eggs to be used to create the embryos to receive high levels of hormones to produce super ovulation that results in a large number of eggs.

Once the eggs are fertilized, made into embryos, the recipient cows are stimulated with additional hormones to make them ready to receive the embryos.

CFS does not think that organic consumers support cows being stimulated with additional hormones to make them produce eggs and then additional hormones to allow the surrogate

NEAL R. GROSS

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

cows to receive the embryos.

This violates the expectations of consumers that hormones are not used in organic agriculture.

Embryo transfer that relies on hormones to stimulate the ovaries of cows should be considered excluded.

We would allow embryo transfers that do not require additional hormones to be injected into either donor or surrogate cows. Such transfers would be in keeping with the spirit of organic agriculture.

We're also concerned that the largest embryo transfer company, Trans Ova, has bought ViaGen, the only cattle cloning company in the United States and raises my concerns at least --

CHAIR BEHAR: Thank you, Jaydee. I think you've reached time.

MR. HANSON: Okay. I would urge you to read our comments on vaccines. We're against GMO vaccines and think you have tools to deal with that.

NEAL R. GROSS

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

CHAIR BEHAR: Okay, thank you.

MR. HANSON: Thank you.

CHAIR BEHAR: Any questions? Steve.

VICE CHAIR ELA: Pardon my ignorance on some of this, but I'm a little confused when you say you're okay with mutagenesis including radiation. I mean, given that irradiation is not okay, but natural radiation is.

MR. HANSON: I would say that we need more of a conversation on that. And that's my last comments that we support future comments on other kinds of induced mutagenesis.

If it were up to me personally I would have us go back and look at mutagenesis that comes from irradiating organisms that was -- some of those varieties were grandfathered in.

And it was not carefully looked at when we started the National Organic Program.

We can do that. I wasn't of the opinion that today was the day to do that. I argued for it, but I got argued down.

CHAIR BEHAR: Okay, thank you. Thank

NEAL R. GROSS

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

you, Jaydee. Next up is Nicole Dehne with Phil LaRocca who will probably have something positive to say.

MS. DEHNE: Good afternoon. My name is Nicole Dehne. I'm the certification director for Vermont Organic Farmers, LLC, the certification program owned by NOFA Vermont.

We represent over 800 organic producers in the state of Vermont. I would like to thank the NOSB for all of your hard work and for the opportunity to give comment today on a number of agenda items.

We agree with the subcommittee's emphasis on the importance of vaccines to organic livestock producers, and that vaccines complement the important organic principle of disease prevention.

We believe that the current regulations prohibit the use of vaccines produced with excluded methods unless they are on the National List.

Currently VOF reviews all the vaccines used by our producers to determine if those vaccines

NEAL R. GROSS

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

have been produced with excluded methods.

We have not found that the livestock producers we certify, beef, pork, small poultry operations and dairy, have needed a vaccine produced with excluded methods.

However, we don't certify large poultry or pork operations, and we understand that there may be vaccines needed by livestock producers in other parts of the country that are not needed in Vermont.

Therefore we support the change proposed by the subcommittee to allow the use of vaccines made from excluded methods when alternatives are not commercially available.

The subcommittee's document does a great job in listing resources available for certifiers to begin to determine whether vaccines are genetically modified.

Certifier consistency is vital to the success of our industry. In the name of this consistency we believe that certifiers should work together and with the NOP to develop affidavits

NEAL R. GROSS

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

and resources to determine whether a vaccine is produced using excluded methods.

In addition the subcommittee gives examples of how certifiers and producers might apply commercial availability of vaccines. That's a helpful resource.

Documenting this search for vaccines will also need to be verified. We suggest that documentation of commercial availability could include statements from a veterinarian, statements from suppliers of vaccines and so forth.

In conclusion we urge the NOSB to pass this proposal so that the industry can move forward and improve consistency amongst certifiers and organic producers regarding which vaccines are allowed for use.

We would also like to thank Jenny Tucker and the Program for confirming this morning that gene editing is a form of genetic engineering that is clearly prohibited.

We would also like to encourage the NOSB to continue their work on evaluating and defining

NEAL R. GROSS

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

new and existing techniques for genetic modification.

In addition, we would like to see the 2016 NOSB recommendation on excluded methods be formally adopted by the NOP and implemented through guidance.

CHAIR BEHAR: Thank you. Any comments? Thank you. I loved everything you said.

MS. DEHNE: Oh good. I'll take a chocolate.

CHAIR BEHAR: Next up is Phil LaRocca with Peter --

MR. LaROCCA: I think one of my positive things is I will be very quick with my comments.

CHAIR BEHAR: Okay. Peter Nell is on deck.

MR. LaROCCA: My name is Phil LaRocca. I'm going on my 43rd year as a commercial organic farmer. I also stand as the chairman of the board for CCOF. I sit on the California Organic Aquatic

NEAL R. GROSS

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

Advisory Board and recently I am chairing a subcommittee called Cal Organic where we're trying to put together some standards for organic cannabis.

First of all I'd like to start off by saying I really hope that we get the origin of livestock through the way we as the organic community want it to be.

Basically yesterday attending the NOC meeting two words came to mind that really struck me and that I felt I should comment on.

And then Jenny and Harriet both addressed those words today. And by the way, another positive, ladies. I thought both your introductions were quite stellar. Thank you.

Anyway, the first word on that is integrity. You've got to have integrity in the organic industry and the total organic movement.

We are lost without it. We have to have integrity if we want to produce as farmers healthy food. We have to have integrity in the organic system so that we can make a healthy environment.

NEAL R. GROSS

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

And we have to have integrity for our own economic system in our organic industry.

And I have to look back several years ago. We did a study at CCOF who was buying organic and why.

And in that study it said -- back then too there was roughly 30 percent more to buy organic over conventional. And by God, everyone said yes, I am willing to pay the 30 percent for organic goods.

But a little anecdote was by God, it had better be organic. Again, back to the integrity factor.

The second word that got me was enforcement. We need enforcement from this board.

We need enforcement for the rules that you people pass.

We need enforcement for the livestock and poultry pasture rules. We also need enforcement to know where we're going.

We need enforcement for people that are trying to tamper with the integrity of what organic is about.

NEAL R. GROSS

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

We as an entire community, as an entire social group have to keep integrity and enforcement on our plate.

But you are the face of the industry right now so you really have that pressure to make sure that we maintain integrity and that we maintain enforcement. Thank you. Positive, quick.

CHAIR BEHAR: Any questions? Thank you, Phil. Okay, next up is Peter Nell, and Mark Kastel is on deck.

MR. NELL: I promise, even though my laptop covers the timer that I will be on time.

So hello, my name is Peter Nell. I work for California Certified Organic Farmers, CCOF. CCOF represents over 4,000 certified organic farmers, processor handlers, businesses at the local, state and federal level.

I'll be commenting today on the Materials Subcommittee's discussion document on marine materials in organic crop production.

First, I'd like to thank the Materials Subcommittee for continuing to engage with

NEAL R. GROSS

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

stakeholders on this topic. I know a lot of that is the leadership of Emily. Thanks, Emily.

By keeping the discussion document for this entire year we have the continued opportunity to hash out these important details.

I would also like to thank the experts on this morning's panel. They did an excellent job explaining nuances with seaweed harvesting, the science, certification of marine materials, et cetera.

And next I'd like to talk about an alternative. As you all know CCOF does not support the certification of marine materials to the wild crop standards for organic crop inputs.

We would suggest that NOSB consider instead whether to prohibit specific species or regions that are at risk of over-harvesting or habitat degradation from use in organic production.

It seems to me there's been a lot of discussion on specific species today and I think the board should take a look at that seriously.

For example, if a task force of

NEAL R. GROSS

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

scientific experts were to find that seaweed, some specific seaweed harvested in the Monterey Bay right outside of CCOF's office was causing habitat degradation, prohibit that.

Let's not look for a blanket solution.

Let's target real world actual risk and ensure that our environment is kept safe.

Should the board move forward towards requiring organic certification of marine materials I'd like to point out that extensive guidance would be necessary.

I believe it was Chris earlier also expressed that. That would likely need an implementation period.

And I would be remiss to say that that implementation period should consider the organic farmers that are using these products on their farm and take that into consideration.

Other than that I think I covered it and I am 30 seconds down. Oops.

CHAIR BEHAR: Emily.

MS. OAKLEY: Thank you so much for

NEAL R. GROSS

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

continuing to comment on this topic. And I really appreciate it.

And I was -- I have a question, two questions.

One is you mentioned if as a last resort which would not be your preference organic certification were required of marine material inputs a 10-year phase-in period should be adopted.

Would you explore anything shorter than that?

MR. NELL: Sure, absolutely. I think if the science can back it up there's justification.

I believe in our comments we did say 10-year previously. That was kind of a ballpark.

If the board were to determine that a shorter implementation period was adequate then absolutely that would work. CCOF, our members, we would figure it out. The organic community has figured things out before. We're doers so we do it.

MS. OAKLEY: So then my final question is have you reached out to producers who use these

NEAL R. GROSS

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

products to share with them some of what the board is looking at and ask if they have an opinion about how we should move forward on this?

MR. NELL: Yes. We do outreach, general outreach to our members. As a farmer yourself I'm sure you know getting farmers to do things sometimes especially if they're very wonky can be difficult.

And yes, absolutely. Should the committee move forward on a recommendation that would have the significant impact we would certainly do a lot more outreach and press the issue with our members.

I believe in our spring comment I broke out a rough number of how many members of ours use inputs that are sourced from marine materials.

I can't remember the number off the top of my head, but it's a good amount.

CHAIR BEHAR: Sue.

MS. BAIRD: You said that you did not support certification, but you suggested that perhaps we just target areas that might be

NEAL R. GROSS

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

negatively impacted and do something about that.

How do we do that if this is the national program?

MR. NELL: Could the board not prohibit let's say through an annotation a geographical area?

MS. BAIRD: No. I mean, I'm asking you how you would suggest that.

MR. NELL: Well, I guess in my response to that is a suggestion that the board should continue to look at, you know, if not certification consider annotation which I know you all are talking about.

What avenues through annotation are possible.

CHAIR BEHAR: Okay, thank you. Thank you for your tenacity and continuing to make comments.

Next up is Mark Kastel with Tom Harding on deck.

MR. KASTEL: Thank you. Hello. My name is Mark Kastel. I am director of Organic Eye,

NEAL R. GROSS

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

a focused project of Beyond Pesticides.

2019 marks 30 years since my certification as an organic farmer pre-USDA. Prior to that my focus was as a corporate and governmental watchdog for over a decade helping farmers launch Organic Valley, Blue River Organics among other business enterprises.

Who owns the organic label? We all do.

Stakeholders and lobbyists have to do more than just cheerleading the NOP and they need to pressure more enforcement rather than rulemaking.

No new rules were needed to assure grazing of all ruminants since the law clearly stated they all had to have access to pasture, and the only time you could temporarily confine them was if you met four criteria delineated clearly in the law.

The USDA ran out the clock and we still have organic factories producing milk, milking cows three and four times a day in the desert at fanciful stocking levels.

No new rules were needed to assure

NEAL R. GROSS

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

outdoor access for poultry. The law clearly states that all organic livestock must have access to the outdoors.

Even if you think that a porch with a concrete floor and screen walls constitutes the, quote, "outdoors," if only 1 to 3 percent of the birds in a building with 190,000 chickens in it could fit into that outdoor space, 97 percent of them are being illegally confined.

No new rules were needed to ban hydroponic container growing. OFPA, not the regulations, and you can't change OFPA one way or another, clearly states that to obtain organic certification your initial OSP must state how you are going to maintain or improve soil fertility.

How do you do that, folks, without soil?

So, the law already requires that once you convert a distinct herd to organic management and production and you're certified all cattle must be managed organically from the last third of gestation.

These violations of the spirit and

NEAL R. GROSS

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

letter of the law are destroying the market and societal value of organics.

The USDA currently and historically lacks the will to enforce the law. See something, say something.

Please contact Organic Eye in full confidence. Let's make the arc of organic bend towards justice.

And in closing let me just say that celery powder, folks, has no business being in organics. And I personally don't care if it was produced with conventional nitrogen or somehow they jazz it up and do it organically. It's a carcinogen.

Organics is supposed to be the last bastion of food safety for families that want to opt out of the conventional food market.

In terms of biological impacts on the human body there is no difference between celery powder, celery juice and synthetic nitrates. They're all preservatives and they're all carcinogenic.

NEAL R. GROSS

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

And one of the criteria as you folks well know in terms of listing or re-listing something on the National List is its impact on human health. Thank you.

CHAIR BEHAR: Thank you. Any questions from the board? Tom.

MR. CHAPMAN: So I've been reading these comments on celery powder, but I noticed we didn't get any comments on yeast and IARC classifies alcoholic beverages as a carcinogen list 1.

I'm curious to know why we're focusing on meat products and also not on alcoholic products.

MR. KASTEL: Are you somehow comparing alcoholic beverages which people are -- the common denominator for organic consumers tends to be level of education.

MR. CHAPMAN: I'm comparing IARC level 1 products that can be made from agricultural sources.

MR. KASTEL: Okay. So, this is on the list. It's clear that the mandate for this board is to evaluate environmental impacts, human health

NEAL R. GROSS

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

impacts, compatibility with organics and essentiality.

You can produce processed organic meat and freeze it and market it safely. The reason that you put preservatives in there -- first of all, if you look historically at why we preserved meats it's because -- that predated commercial refrigeration.

So it was a safety issue. The only way you could consume any meat was to somehow preserve it. The same reason we make yogurt and ferment vegetables.

You don't need to add preservatives to those meat products. They can be kept frozen.

For commercial reasons, and I am sympathetic to that because I work for farmers who want to sell more organic meat and we all want to see the market grow.

It's a convenience. All those processed meat products come into the retailer frozen, or at least the vast preponderance of them do.

NEAL R. GROSS

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

And then they thaw them out when they put the hot dogs in the cooler. That's for convenience so you can take them right home and throw them on the grill.

So it will potentially have an impact on sales, but it won't eliminate the availability of processed organic meat products.

MR. CHAPMAN: I guess I'm seeing that I can have frozen pork loin instead of ham, but I still don't get how from a carcinogen perspective why processed meat products are being called out and alcoholic beverages are not.

MR. KASTEL: I think you're trying to change the subject, Tom. I'm here talking about celery powder.

You folks have to go to sleep at night.

Right now there are petitions from two other NGOs to change the labeling on all preserved meats because it's a sham.

To suggest that you can put on the label no nitrates or no nitrites, or you can put on the label uncured when this material has the same

NEAL R. GROSS

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

functionality as --

MR. CHAPMAN: That's not organic. That's not our area of responsibility. That's a FSA --

MR. KASTEL: No, that's not your area. What I'm saying is what organic labeling is, and people come to organics because they believe in organics.

And it's the Cliff's Notes version of doing their food research.

I want you folks to vote one way or another and go home and think about the mom or the dad who's buying their kids some kind of preserved meat product that they might put in their lunch pail and understand that there is firm published science that indicates this material is carcinogenic in nature. That shouldn't be an organic food.

CHAIR BEHAR: Okay. Lisa had a comment or a question.

MS. DE LIMA: I just want to clarify. To my knowledge as a retailer we don't get any

NEAL R. GROSS

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

of those products in frozen and slack them out. What you referred to has hot dogs and you said all those products come in frozen and the retailer slacks them out anyway.

Slacks them out, takes them from frozen to cold. I just want to clarify that at least for our 20 stores none of that product works that way.

And my second point is I do agree that I think sales would decrease as you pointed out.

From my experience in the last 20 years anytime we have tried to sell a frozen meat product it just doesn't sell. Consumers don't buy it that way.

So I feel like in the long term if we went down that route what would happen to those farmers is not that they'd be selling a little less out of the freezer, I just think they wouldn't be selling at all.

MR. KASTEL: Okay. First of all I work with manufacturers. Those products are frozen. If your distributor thaws them before you get them and puts them in a refrigerated compartment instead

NEAL R. GROSS

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

of a freezer I can't control that. I'm not aware of that.

There might be some that are legitimately not frozen first.

Henrik Ibsen, the Norwegian playwright wrote a play once entitled An Enemy of the People.

And an economically disadvantaged village looked to these hot springs to be their economic salvation.

And the town doctor found that they were contaminated with the tailings from the closed mine with heavy metals and toxins.

And he said thank God we figured this out before we went to market.

Folks, the number one consideration is safety and the integrity of the organic label. We will lose more in general by not prohibiting materials that are becoming wider and wider in terms of the knowledge of their deleterious impacts on human health than we will by losing those sales.

It becomes incumbent upon all of us as a community. But you're on the front line Lisa

NEAL R. GROSS

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

as a retailer to educate those consumers with the signage, with the newsletter articles that that's where you find safe organic meat is in the freezer.

And you'd have to either do a little bit of planning, or stick them in the microwave before you barbecue them.

CHAIR BEHAR: Thank you, Mark.

MR. KASTEL: Thank you, Harriet.
Thank you, Madam Chair.

CHAIR BEHAR: Tom Harding is next with Bill Collins on deck.

MR. HARDING: Good afternoon and thank you very much. I want to thank all of you on the NOSB and the NOP for all the good work you do.

I represent Green Act Supply who is the petitioner for fatty alcohols to be used in organic tobacco crops.

As you know we have resubmitted a new petition and it's been approved and we really appreciate the opportunity to take it forward.

It's very important that you recognize since we submitted our first petition -- I should

NEAL R. GROSS

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

say our third because we revised it a number of times -- that the EPA has reclassified this material, fatty alcohols, which is used both in -- all kinds of things, but including food, that it's now placed it on the biochemical list.

Whereas it is a safer, one of the safer chemical parts. Biochemicals, naturally occurring. Non-toxic mode of action and safe history of exposure to humans.

These are really important things. Fatty alcohols for us to be placed on the National List is really important to our family farmers. And you're going to hear from many of them in a few minutes and also from the universities who support this work for many, many years.

I wanted to address briefly the minority position which I really respect and appreciate.

When we submitted the first petition for fatty alcohols we requested that tomatoes and tomato grafting be added to the list.

We were informed immediately by the

NEAL R. GROSS

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

NOP, rightfully so, that because our EPA label was not complete therefore we had to remove tomatoes and tomato grafting.

That work continues to go. In fact there's 3 million tomato plants grafted in California right now that are using fatty alcohols.

So I wanted to make sure that -- and the other thing that's really important is that when we were requested to remove it we weren't given a choice because of that.

And that's really important, that you have to have approved labels to do this work.

The other thing that's really important is we have done a number of field trials.

You have in the petition the field trials that we did at North Carolina State not only one year, but again this year.

We also did those at Yunnan Agricultural University, the College of Tobacco Sciences.

We took your advice. We looked at other options, all kinds of other materials and

NEAL R. GROSS

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

they were clearly evaluated.

And hands down, both from the grower standpoint and from the research scientist standpoint nothing compares to fatty alcohols in all of the ranges and therefore it is the best choice.

I'll give you some examples. There are no detrimental chemical interactions with fatty alcohols and other materials. Proven to be safe and effective for humans and therefore our workers and all that the plant touches.

It controls suckers and that's a really important part in commercial growing today. Why?

Well, because suckers do one thing. They reduce the size of the plant itself, particularly the leaf, and therefore if you know anything about what we're doing here it's the leaf that we sell.

The higher quality, the larger the leaf, the more pounds we get, the better off the farmer is.

Without the availability of alcohols we would be in trouble.

NEAL R. GROSS

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

I wanted to say thank you very much.

I hope you will vote yes for this petition to put fatty alcohols on the National List. And by the way, my monarch is saying please vote yes and I want to thank you again.

CHAIR BEHAR: Any questions from the board?

MR. HARDING: Any questions?

CHAIR BEHAR: I don't see any. Thank you, Tom.

MR. HARDING: Well, the experts are following me.

CHAIR BEHAR: Okay. So, Bill Collins is next with Faylene Whitaker on deck.

MR. COLLINS: I will have some assistance to do what I want to do.

I'm William Collins. I'm a retired professor from NC State University. I was a tobacco extension specialist for 20 years and I taught a course on tobacco technology.

And I had two hours on sucker control in there, but we're going to add here to the three

NEAL R. GROSS

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

minutes.

I've worked all my professional career since 1966 some with sucker control except a few years and have a big interest in it.

So what I want to do is through showing you how do we get to the problem of controlling suckers and what it means to control suckers in tobacco and also give you information on how you can sustain it from a sound agronomic environmental and economic viewpoint.

Now, tobacco plants come out of the greenhouse as many horticultural plants might be.

And it goes to the field about 10 days after the last frost-free period regardless of what area in the United States you may grow it in.

And we grow it at six to eight thousand plants per acre in the culture that we are familiar with.

And the plant undergoes vegetative growth for the next 60 days. So, the first 30 days more or less is development of roots, and then the next 60 days it puts on leaves, up to 20-25 leaves

NEAL R. GROSS

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

per plant.

Then, Rowan, if you'd just hold up that plant, that beautiful flower right there that we had trouble getting on the airplane. Anyway, they top it and that's when the fun begins.

So the plant tries to reproduce another way and at each leaf axle where there can be 20 to 25. It has the potential of producing three suckers, three suckers.

And they must be controlled or you can't grow tobacco the way we're doing it.

Now, what we have is the potential to have 60,000 suckers per acre and it must be controlled.

And in organic production the only way to do it that we know that's practical at all is with fatty alcohols. And we've had a lot of experience in just doing that.

You could do it with this. And one of the reasons I'm here today, as a child I came from a tobacco farm, I helped do this, pulling these suckers.

NEAL R. GROSS

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

And it's prohibitive now. The average cost of labor according to our economic people in our department on the university they're publishing is right at \$20 per hour of labor.

So it can't be. And it costs more if they remove them by hand than it would be if they used some other way of doing it.

So the use of alcohol is the only feasible practical control of suckers in organic produced tobacco and it's the mainstay for growers who are expanding organic production in other crops.

Mr. Carter will come up behind me sometime and he was one of the pioneers in this area, and he's expanded to others.

But I think he will tell you that the profits we're able to get from organic tobacco production help subsidize us and get it off the floor.

So I would like to end by saying -- oh, I'm down to two.

CHAIR BEHAR: I think you've reached

NEAL R. GROSS

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

your time. I have one quick question.

MR. COLLINS: Good.

CHAIR BEHAR: And that is how is it sprayed in the field? Is it kind of a blanket sprayer? Is it somehow --

MR. COLLINS: It is a directed sprayer. We have three nozzles over the roll mechanically and it's sprayed.

CHAIR BEHAR: Okay.

MR. COLLINS: And I might answer, I volunteer. They say I volunteer in court cases, but I'll tell you there's another way of doing this.

You can do it with some things called vegetable oil, but you cannot spray them. You cannot spray them.

They have to be put on by hand because if it were put on the leaves it would blister them and also it ends up in the wrappings of the tobacco cigarette. So it's a no-no.

CHAIR BEHAR: Okay. Steve had a question.

VICE CHAIR ELA: When you're hand

NEAL R. GROSS

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

de-suckering what are the incidences with the farm workers of tobacco poisoning or nicotine poisoning?

How often does that happen?

MR. COLLINS: How often does nicotine poisoning?

VICE CHAIR ELA: From the farm workers.

MR. COLLINS: It wouldn't be that much at the time of suckering. The nicotine portion occurs later in the game, that is when they're harvesting.

And about 70 percent of our tobacco, and it's increasing, is being harvested by machines so people don't put their hands on it.

And we have learned some things to do.

If tobacco is harvested when it's dry that's less of a problem.

But I admit to you it is a significant problem with people who have not worked around tobacco who are working.

And some of the H-2A workers may not have been around tobacco. If they're tobacco users it doesn't have any consequence.

NEAL R. GROSS

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

CHAIR BEHAR: Emily.

MS. OAKLEY: Could you give me a little clarity on the \$20 per hour for labor figure that you were stating? Because I didn't understand exactly what that pertained to.

MR. COLLINS: Well, most of our workers in tobacco now are H-2A, most or all of them.

And you have a certain fee that comes in that's somewhere in the \$11 to \$12 range.

But they also have to pay to get them here. They have to pay a fee of like \$1,000 or so. And they also have to provide housing and a whole lot of other things.

So our economist, Dr. Blake Brown and so forth, they say it's right at \$20 an hour. It's terrible. We don't make that sort of profit off tobacco.

Other questions or comments?

CHAIR BEHAR: No, that's it. Thank you.

MR. COLLINS: Thank you.

CHAIR BEHAR: Okay. Faylene Whitaker

NEAL R. GROSS

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

with Billy Carter on deck. And we're still at about 20-25 minutes behind.

MS. WHITAKER: I am Faylene Whitaker, a partner of Whitaker Farms and Golden Knob Organic Farms in Climax, North Carolina.

We have three generations on our farm where we grow both conventional and organic crops.

We grow organic tobacco, hemp, corn, soybeans and wheat.

We also grow conventional crops of tomatoes, strawberries, vegetables and greenhouse crops.

I'm here today to ask for your support for the use of fatty alcohols in pertaining to the production of organic tobacco.

I am not a scientist, don't claim to be, and not a chemist. So I can only relate to how this product applies to my farm and other farms growing organic tobacco.

I know that protecting organic tobacco is not on the top of everyone's radar screen to protect. I understand that.

NEAL R. GROSS

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

However, I do believe that it is a safer product than conventional tobacco due to the limited pesticides we can use on the product.

Fatty alcohols have not been shown to have an adverse effect on either humans or soils in all the studies I have read.

Please allow me to explain why this product is important to me as a farmer.

We only grow about 100 acres of organic tobacco. But this has allowed us to convert over 900 acres to other organic crops, for the production of other organic crops.

Due to the crop rotations it has also allowed us to improve soil and water quality, and without this production of organic crops we would not continue to grow some of the other organic crops due to the cost of inputs and labor associated with those crops in our area.

We need the approval of fatty alcohols for sucker control in our organic tobacco.

This product keeps our workers from having to be too exposed to as much green tobacco

NEAL R. GROSS

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

which is high in nicotine during the growing season when sucker growth must be removed every week.

Also when there are tender suckers on the plant it causes the buildup of insects that we must then use more insecticides to protect the plant.

We have been growing organic tobacco for eight years and have been able to use fatty alcohols under our certifier for all this time.

We have had no incident of sickness from the green tobacco during this time because our workers have not had to be actively handling the tobacco.

They have been in the fields doing other work such as hoeing and weeding which is necessary in the organic production.

We as farmers believe in this product and that it is a safe product. We use it weekly once the tobacco starts budding for about 6 to 10 weeks.

We need this product to stay in organic production where inputs and labor are higher than

NEAL R. GROSS

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

conventional costs.

I know for our farm it is essential for us to stay in the organic production.

Whether we want to admit it or not everything in business comes down to the economics and the farms are businesses.

We're in the business of farming because we love what we do. But it also must make money for us to continue to feed and clothe our families and hopefully keep passing this farm down for generations to come.

I would like to urge you to approve fatty alcohols. Thank you for your time and attendance. I'll take any questions.

CHAIR BEHAR: Thank you. Okay, next up is Billy Carter, and then Stanley Hughes, and then we will take a break.

MR. CARTER: Thank you for the opportunity to speak. My name is Billy Carter. I'm an organic farmer in Eagle Springs, North Carolina.

On our farm we grow tobacco, sweet

NEAL R. GROSS

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

potatoes, field corn, hemp and small grain organically. Our first parcel was certified in 1998 and we currently have over 1,400 acres in certified organic production.

So fatty alcohols allow us to effectively deal with controlling sucker growth.

Effectively controlling sucker growth allows for reductions in pests because they are less attracted to tobacco that is free of suckers.

Also we realize more efficient use of our fertilizers because we do not overcompensate just to account for sucker growth.

And it would be very difficult for us to grow tobacco more than just a small quantity if any at all if we did not have an effective sucker control material.

My history of growing organic tobacco predates the introduction of fatty alcohols. And I have used both soybean and mineral oils as sucker control materials and both of those materials proved to be woefully inadequate but equally detrimental is that application involves many hours

NEAL R. GROSS

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

of nasty, grueling work for my employees.

It also created the ceiling to further expansion in terms of more acres because of the limitation of labor.

But with the use of fatty alcohols we've achieved much higher yields of better quality tobacco, and more importantly we have removed our workers from a job that was inherently dangerous because of the great length of time it required in the field daily during the hottest parts of the summer to hand apply those inputs.

So we value our employees, many of whom have been with us in excess of 20 years. And to a man without fail whenever we no longer were using the mineral oil or soybean oil they expressed great relief. They were so glad to be rid of that particular job.

So we've been able to expand our organic acreage rapidly because we do have tobacco as an underpinning for doing that.

It allows us to have these other crops in organic rotation.

NEAL R. GROSS

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

And while we would still have some organic production without growing tobacco I assume that it would probably be on a much smaller scale.

And without fail in the conversations that I have with other organic tobacco growers that's the same sentiment that's expressed is there is a conclusion that has not been reached as to whether they would continue to grow organically at all.

The introduction of the use of fatty alcohols into organic tobacco production absolutely has been the underpinning of the rapid growth of certified organic acres within our state.

So again, just let me take the opportunity to thank you for the time that you commit to the very important work that this board does.

And I'd like to ask you to consider my and the other folks' request to permit fatty alcohols as an allowed substance in organic tobacco production. Thank you for your time.

CHAIR BEHAR: Thank you. Dave.

NEAL R. GROSS

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

MR. MORTENSEN: Billy, I was wondering if you could tell -- I don't know, maybe others don't know.

What is the market for organic tobacco? I used to work in North Carolina and I've seen it traded for conventional tobacco. But what is the market and where is it sold?

MR. CARTER: There's really one primary opportunity to market organic tobacco consistently and that's with Santa Fe Natural Tobacco.

And most organic tobacco growers are in a contractual arrangement with those folks. And it's a significant premium that they pay just as is the case with other organic crops.

They're paying you for the risk involved and the commitment you've made to go through the certification process.

CHAIR BEHAR: Emily.

MS. OAKLEY: So after the webinar I was actually looking up OTAC a little bit on the internet.

NEAL R. GROSS

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

And it seems -- like you mentioned the Santa Fe buying company. It seemed that this material was actually developed by the Santa Fe company in concert with its manufacturer. Is that correct?

MR. CARTER: Yes, I would think that would be a fairly accurate statement. The manufacturer already had the capacity to do that.

And I think the situation was that Santa Fe Natural encouraged them to explore the opportunity to use all the natural inputs and try to get it to be utilized as an organic input.

CHAIR BEHAR: Thank you.

MR. CARTER: You're welcome. Thank you.

CHAIR BEHAR: Stanley Hughes is next and on deck is a break.

MR. HUGHES: Good afternoon. I thank the board for hearing our plea about trying to get this fatty alcohol approved.

My name is Stanley Hughes. I'm a small farmer in Orange County from North Carolina. And

NEAL R. GROSS

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

I've been farming all my life.

I made small farm of the year with A&T 2004, A&T State University. And 2013 with Carolina Farm Stewardship Association.

And my plea is that we get this fatty alcohol approved because without that -- I've been certified since 1996. I was one of the first growers when they brought the Program to Oxford, North Carolina.

And if it hadn't been for that I would be totally out of farming because the price of things got so ridiculous I couldn't farm.

Having organic tobacco helps me have a decent labor force and other crop rotations such as other vegetables I grow like hemp. Well, hemp is not a vegetable but I've grown some hemp and collards, kales, sweet potatoes, field tomatoes, and some beans for the fresh market. So I do that.

We've had our family farm for years. We're at least over 100 years old. I'm the third generation.

Before then I have tried -- when I was

NEAL R. GROSS

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

coming up as a boy we used to have to hand sucker tobacco.

Well, then the conventional market at one time you could hand apply bayol oil and that wasn't working so they come up with other chemicals.

But like then after the organic program come in we came back using mineral oil. And that was time-consuming and the quality of the tobacco wasn't as well. And if you used too much it would just like kill the stalk.

And the fatty alcohol make a better quality, just a cleaner process of using the tobacco.

I don't think there's no harm in -- for using it. Nobody gets sick or anything. So I'm just well pleased with it and I hope the board will approve it.

And I really thank you for your time for listening to us to hear our cry. But that's what we need to do, continue to have a good successful organic program in tobacco. Because without that there's going to be a lot of jobs lost

NEAL R. GROSS

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

in the state of North Carolina and equipment. Prices are going to drop. There's going to be a lot of farmers out of business.

CHAIR BEHAR: Thank you. Steve.

MR. HUGHES: Thank you.

VICE CHAIR ELA: I just want to say, Stanley, and we say this to most of the farmers, but to all of you that traveled up here thank you for making the time to come and give us comments directly.

As a farmer myself I know it takes time and effort to be away from the farm so thank you to all the farmers that came.

MR. HUGHES: All right. Thank you.

CHAIR BEHAR: Okay, with that we will take a break. It is 3:47 everyone. Be back here at 4 o'clock.

(Whereupon, the above-entitled matter went off the record at 3:48 p.m. and resumed at 4:01 p.m.)

CHAIR BEHAR: Okay. So next up is Jen Berkebile with Kyla Smith on deck. Is Jen in the

NEAL R. GROSS

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

room yet? We don't have all of our board members so we're just going to wait just a little bit.

Okay, we're going to get started.
Thank you, Jen.

MS. BERKEBILE: Good afternoon. My name is Jen Berkebile, materials program manager at Pennsylvania Certified Organic.

We certify over 1,600 organic operations throughout the U.S. Today I'll be commenting on paper and vaccines.

I appreciate the Crops Subcommittee's work on the topic of paper for use as a crop production aid.

Regarding synthetic content I've heard during public comments the distinction made between cellulose and synthetic fibers.

I do want to caution the subcommittee about making this distinction and limiting synthetic fibers.

Cellulose itself is frequently synthetic which I think has already come up. The technical report for newspaper states that

NEAL R. GROSS

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

virtually all paper production involves the sulfite or alkalite extraction of cellulose from wood which would render it synthetic.

So any limit on synthetic fibers may unintentionally limit cellulose.

PCO has concerns about whether the proposed limit to synthetic polymers, biodegradability standards and biobased content requirements can possibly be met.

We don't really want to see another listing like the one for biodegradable biobased mulch.

For that reason PCO supports the listing of virgin or recycled paper without colored or glossy inks.

Now, onto the proposal for the use of excluded method vaccines in organic livestock production. Thank you to the Livestock Committee for the work on this.

I'm approaching this topic with two lenses. On the one hand the allowance of vaccines produced by excluded methods is a source of

NEAL R. GROSS

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

inconsistency among certifiers which is a disservice to organic producers.

I would very much like to see all certifiers on the same page.

On the other hand I want to strongly advocate for the availability of vaccines for our producers.

Prevention of medical issues is an important tenet of organic livestock production and vaccines are absolutely vital to this.

PCO's concern is that a burdensome commercial availability restriction will discourage producers from using vaccines.

For that reason I request more guidance and technical resources on the entire process of determining commercial availability of an equivalent non-GMO vaccine including roles and responsibilities.

Some certifiers have had success determining the GE status of vaccines, but none have had to work through the complicated steps of determining what vaccines are equivalent and/or

NEAL R. GROSS

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

whether non-GMO vaccines are commercially available for the producer, or determining the producer's compliance with this.

This will be difficult if not impossible for the client to demonstrate alone as vaccines are not labeled with GE information.

And it will be difficult even for certifiers who do not have the technical livestock medical knowledge to assess whether or not vaccines are equivalent.

Is it possible for the NOP to work with APHIS for vaccines labeled something like non-GMO for organic production.

I do material review and I know how difficult this annotation will be both for certifiers and operators to verify without more guidance from the NOSB and NOP.

Thank you, really, all of you for your time and dedication on the board and your work on these issues.

We appreciate the role that every one of you plays in supporting and moving forward the

NEAL R. GROSS

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

organic industry.

CHAIR BEHAR: Steve.

VICE CHAIR ELA: Same question for you as earlier. If we just annotate paper pots to say no colored or glossy inks just like the newspaper listing it really, it doesn't limit the amount of plastic, other synthetic fibers in those pots.

I mean, we know that roughly -- at this point there's a necessity for 15 to 20 percent from what manufacturers have told us.

But I don't think as a grower that I'd want 50 percent or as a board member.

So if we don't annotate with some limitation it seems like we leave the door open for any amount of undesirable synthetic fiber.

So I guess I'd like your feedback on that. We've had a number of people say just annotate it simply, but I don't think that really solves the problem.

MS. BERKEBILE: Right. I do understand your concerns. I do think it's up to the board to determine if there is a level above

NEAL R. GROSS

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

which synthetic polymer content is harmful to human health or the environment.

And so I would just advise that that level is verifiable, that it's possible for certifiers to verify.

And I would advocate for the allowance of paper pots that are on the market. So a level that allows those that are currently on the market. I don't know if that's helpful.

VICE CHAIR ELA: One thing we did not address were adhesives. We kind of kicked that can down the road.

But that's another one. Most people said we should allow adhesives, they're already in paper. Well, that's a quagmire if you read the TR because the TR didn't even go down that road.

Any thoughts on how we should -- if we should just leave that one untouched, or?

MS. BERKEBILE: That's an interesting question. Of the two annotations that were proposed you're right, I don't think either of those addresses adhesives.

NEAL R. GROSS

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

The ACA materials working group met and they came up with a different annotation proposal which lists paper pots in the hopes that that listing would encompass the adhesives that are in paper pots.

But again that doesn't give any sort of limits, upper limits on those adhesives or what they are really. So I would leave that up to the board.

CHAIR BEHAR: Ashley.

MS. SWAFFAR: I think Scott was first.

MR. RICE: Either way. I had a question on vaccines. Harriet mentioned earlier to address some of the concerns about lack of guidance or resources. Putting something in the cover sheet. Is that something that you would be comfortable with and still have us move forward?

MS. BERKEBILE: Yes, I think so. Yes.

MR. RICE: Not knowing what that says.

MS. BERKEBILE: Right. That's the question. But I think so, yes.

I do appreciate that you had said that,

NEAL R. GROSS

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

Harriet.

MR. RICE: And I had one, it's not really a follow-up. It's a different question. But real quick.

I saw in your comments you also said that about half of the tobacco producers that you certify don't use fatty alcohols, but peanut oil and avenger.

Was curious to hear a little bit more about the effectiveness of that if you're aware.

MS. BERKEBILE: I don't know that I can speak to that very well. We don't have very many tobacco producers, maybe 20.

I haven't heard that those methods are or aren't effective.

MR. RICE: Okay, thanks.

CHAIR BEHAR: Ashley.

MS. SWAFFAR: So my question is about vaccine. The same that I asked Jackie. Would you be comfortable with the ACA developing some type of best practice or developing that list? Do you think that would alleviate concerns?

NEAL R. GROSS

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

MS. BERKEBILE: Two things about that.

I think that would be great. I do think the ACA developing best practices is helpful.

But of course we can't require members to adopt that. So if we develop any sort of guidance on who is doing what, whose roles and responsibilities are what, that doesn't have to be adopted by our members.

And our members are primarily certifiers in the U.S. So I don't know that we would have the knowledge of other countries' vaccines and be able to kind of develop a list for other countries.

And then it wouldn't be available for certifiers in other countries necessarily if they're not a member of the ACA.

CHAIR BEHAR: Did anyone, you or someone else at PCO look through the links that were in the proposal? Did you find those items confusing or difficult to identify the GMO vaccine there and which ones? Was that difficult to navigate?

NEAL R. GROSS

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

MS. BERKEBILE: Well, it's my understanding with the APHIS list -- so it's my understanding that list is a fairly complete list of vaccines in the United States.

And I think there is an annotation for in the product code perhaps for recombinant vaccines which would be produced with an excluded method and for DNA vaccines or called something like that which would be considered an excluded method.

But I think anything that is not annotated as those would be -- we would have to verify essentially. So I don't think that information is there. I think we'd have to get that from the manufacturer.

CHAIR BEHAR: Thank you.

MS. BERKEBILE: Thank you.

CHAIR BEHAR: Okay. Next up is Kyla Smith. And I wanted to just mention to everyone that there is a reception tomorrow night being sponsored by CROPP Cooperative, Danone North America, Heritage Poultry Management, Maple Hill

NEAL R. GROSS

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

Creamery, Phillips Mushrooms, Ohio Ecological Food and Farming, OTA, Rodale, Stonyfield and Wigle Whiskey.

And the cards are out there. And I was told it's walking distance. So that will be tomorrow night, Thursday, and you can look for the information outside. Thank you, Kyla.

MS. SMITH: Yes. Okay. Good afternoon. My name's Kyla Smith. I am the interim co-executive director and certification director at Pennsylvania Certified Organic. PCO certifies around 1,600 operations throughout the U.S. I'll be commenting on vaccines and adding to my colleague Jen's comments that she just made.

But first I'd like to welcome you all to Pennsylvania. It's my home state so I'm glad to have you.

Thank you all for your hard work and especially to the outgoing board members. Your dedication and commitment is off the charts.

So as Harriet just mentioned please join us tomorrow night for the reception. We'll

NEAL R. GROSS

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

be celebrating organic successes experienced here in Pennsylvania and throughout the world.

And now onto vaccines. So I'm acknowledging that PCO has a fair amount of unease on this proposal because it will be a big change to our process and change is hard.

Commercial availability has been part of the organic regulations in the context of seed and 606 material since the rule was published.

We've had 17 years to bat these around and as many of us in this room know all too well that the debate on clarifying enforcement of the seed guidance only just concluded at the spring meeting.

With that history in mind PCO encourages our community to ensure that certifiers and operators have the resources that we need on the front end of the process so that we aren't here 17 years later trying to figure out inconsistencies of enforcement.

So let's set us up for success now. And this could look like a bunch of different

NEAL R. GROSS

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

things. An NOP guidance document similar to the seed guidance. An ACA best practices document.

Training sessions at certifier training or in the Organic Learning Center.

There will certainly be parallels that we can draw from on the application of commercial availability of seed.

However, there are also differences, the biggest being that an operator on their own can determine if a seed is organic or not organic and apply commercial availability.

Whereas with vaccines it would be hard if not impossible for them to do so on their own as vaccines aren't labeled with that information.

It seems as though an operator will always need to consult with either their certifier or another third party such as their vet to determine compliance with this restriction. Or they may just not choose to use vaccines at all.

So we're hoping that the following can be addressed prior or in conjunction to the rule change.

NEAL R. GROSS

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

One, define roles and responsibilities for commercial availability assessment between the certified operator, the certifier and third parties such as vets.

Training around how to determine equivalency and efficacy.

Questions we have are will manufacturers disclose this information to us and if not, would our review just default to GMO and initiate the commercial availability.

Does state regulatory compliance with a certain type of vaccine fit into quantity, quality and form, and if so, where.

And we want to make sure that we can support operators so they just don't avoid using vaccines if they feel that the commercial availability restriction is too burdensome.

So it feels like this won't be insurmountable, but it still feels like we're pushing the ball uphill. So, thanks.

CHAIR BEHAR: Rick.

DR. SEITZ: Does your organization

NEAL R. GROSS

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

keep a database of vaccines and ones that are known to be GMOs, or ones that are not GMO so people you certify can check with you?

MS. SMITH: We currently don't review for GMO right now.

DR. SEITZ: Okay. What I was thinking of, usually since I'm certified I go to my certifier to find things out.

I was just wondering if it wouldn't be starting that process to be ready for it where they could call up and see what's available.

MS. SMITH: Sure. I think that the certifiers now that are reviewing for GMO, the commercial availability doesn't come into play here. So it's just allowed or prohibited.

And so the commercial availability clause will just add another layer. And I think it's going to be just a challenge.

We can certainly provide a list of these are all the ones that are allowed. And so that would be easy if a producer would choose to go that route.

NEAL R. GROSS

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

But they might say oh, yes, but my neighbor said that this one is better. So then they're going to have to figure out if that one's GE or not. And they're not going to be able to tell.

So then we're going to have to contact the manufacturer to figure that out and whether or not it's equivalent or not and if it's --

DR. SEITZ: Well, I was just wondering when you go to do your annual certification how you close that loop when you're looking at materials as inputs to see they're still certified.

MS. SMITH: That's part of our process. It's just a little bit different than anything that's currently part of the regulations.

DR. SEITZ: Thank you.

CHAIR BEHAR: Thank you. That's it. Okay. Chris Pierce is next, and Johanna Mirenda is on deck.

MR. PIERCE: Good afternoon. My name is Chris Pierce. I've spoken to this group many times over the last many years.

NEAL R. GROSS

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

I serve as president of Heritage Poultry Management Services and we are based in Annville, Pennsylvania so thanks for coming to Pennsylvania.

Our primary business focus is to support small family egg farms with detailed flock management services which include flock health, certification compliance, food safety and the overall production support.

Our customer base currently includes over 50 certified organic egg and poulet farms all located in Pennsylvania.

So my comments this afternoon are in support of our organic poultry farmers and their flocks based on the significant amount of knowledge and expertise my team at Heritage has.

There's three areas this afternoon I'd like to share my thoughts on. All of the organic egg farms that we work with are following much of the OLPP, the organic livestock and poultry practice rule that has yet to be implemented because it's the right thing to do. We have implemented

NEAL R. GROSS

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

many of those practices with the strong focus of hens being outside to support both the integrity of the organic program and for the strong consumer expectations that that's the kind of farms they expect their organic eggs to come from.

So over the past many years many of our organic farmers have experienced increased bird health issues that are impacted by the increased free range exposure.

A critical part of our organic management plan is to put practices in place to limit the risk factors.

Included in our management process is a toolbox. We all talk about this toolbox. And that we need to meet the needs and the challenges that each farm will face.

With exposure of worms and parasites that our hens have in the free range we've seen increased challenges with hens infected with round and cecal worms.

Currently the natural remedies are not satisfactory in helping the hens resolve the worm

NEAL R. GROSS

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

issue which greatly impacts the hen's ability to absorb their nutrients and is a poultry and welfare issue.

Think about this. Think about the experience you have is when you crack open some eggs for breakfast, lunch, or dinner and there's a worm in that egg.

Now, that might not have happened to you, but it does happen. And it is a real turnoff.

It would be to me and I love eggs. Like I am Mr. Egg. But that would be a turnoff to me.

So that's the kind of thing that I'm asking the NOSB to approve adding fenbendazole to the National List for use in organic poultry production.

We also provide services, just as a background, to conventionally fed free range farms, and we have had firsthand experience in using fenbendazole and very successful in elimination on a rather quick time frame of helping the flocks deal with the worm issues.

I also want to share my support of the

NEAL R. GROSS

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

NOSB's fall 2019 proposal on vaccines from excluded methods which is a critical part of the process and the inclusion of the rule to use vaccines from excluded methods based on commercial availability.

Wow, I'm almost out of time. On behalf of the organic egg farmers whose layer flocks are considered long life flocks there's three types of vaccines that are excluded methods, salmonella, E. coli, and ILT.

Food safety regulations for us to sell any eggs in the state of California we must vaccinate with some alternative produced vaccines to sell eggs in the state of California.

I didn't finish anything, but hopefully you have some questions for me.

CHAIR BEHAR: I'd like to ask two questions. Do you think the proposal is requiring GMO vaccines to not be allowed? Is that the way you're reading it?

MR. PIERCE: No.

CHAIR BEHAR: Because we did get a lot of public comments that said that.

NEAL R. GROSS

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

MR. PIERCE: And I've read through it, but I'm not like Ph.D. level.

(Simultaneous speaking)

MR. PIERCE: The part that I'm looking at is we need the tools to use if the organic approved tool isn't there.

An example, a little bit further. So California passed CDFA. So in order to sell eggs in the state of California there's a requirement that we have to have two live vaccinated for salmonella and one killed.

And that's all of our farms. All of our organic farms are on that program because we don't know whose eggs are going to be going to that state.

And with national distribution that distribution center may cover Nevada, Arizona and California. So retailer world, they want to make sure all their eggs that they get meet that requirement because they don't want to get in trouble for having eggs go to the wrong place.

CHAIR BEHAR: So are you aware the

NEAL R. GROSS

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

proposal allows you to use genetically modified vaccines if there's no commercially available alternative?

MR. PIERCE: I do understand that. The key is to make sure -- a vaccine is not a vaccine. These may not be comparable, equal.

CHAIR BEHAR: Right. So we'll work that out.

The other question I have is about do any of your producers either -- have they set up their henhouses or could they set up their henhouses to have rotated pastures so that the chickens would not continually reinfect themselves with parasites?

MR. PIERCE: Sure. Unfortunately the farmers that we work with are fixed houses. So they're not mobile houses that they're able to rotate paddocks.

And I understand where you're going. Most of our farms have anywhere from 2 to 5 square foot. I know it's not the 20 or something we were talking about, that Europe has a higher standard.

NEAL R. GROSS

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

But that 2 to 5 foot, it varies from farm to farm. They don't have the ability to rotate paddocks.

As well as the challenge of having the land that would meet the three-year requirement if we expanded the space.

CHAIR BEHAR: I have seen one or two that when they were built they were set up to have an east -- one side and then the other side. And so they could kind of rotate over a two to three-month period.

MR. PIERCE: And the folks that we have, they're not the large size that Mark Kastel -- our largest farm is 20,000 hens which is the size that's needed for that to be the farmer's full-time job versus a hobby when they come home from their other job.

CHAIR BEHAR: And I've visited farms of that size or bigger as an organic inspector. And one more question.

How many times during the life of a flock do you think the fenbendazole would need to

NEAL R. GROSS

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

be used?

MR. PIERCE: Good question. Not every flock will need it -- a flock rotation is on a farm around 14-15 months. It's not every year, or every flock.

I will say in Pennsylvania the last two years have been significant rainfalls. So the water table has risen and we believe that's also part of the issues that we're dealing with with these ancient diseases, black head, fowl cholera, worms, all kinds of stuff we're saying that we didn't see when we confined our birds in the barns because they didn't have that exposure.

But with the water levels raising. If it's dry next year we probably won't need it as much. But if it's a wet year we may.

To answer your question it may not be every year, but it may be once in a flock if it is needed.

CHAIR BEHAR: So, it wouldn't be two, three, four times in a flock.

MR. PIERCE: No, I don't see it -- as

NEAL R. GROSS

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

needed. But I don't anticipate that.

CHAIR BEHAR: Okay. Thank you.
Emily.

MS. OAKLEY: You said that your largest producer had 20,000 birds.

MR. PIERCE: In one barn and they have two barns at the most. So it's 40.

MS. OAKLEY: So 10,000 birds per barn?

MR. PIERCE: Two. Twenty thousand per barn. So the farms we work with would have no more than two barns on a farm, and each barn would have 20,000 hens.

MS. OAKLEY: So what's the square footage of a barn?

MR. PIERCE: It's 46 by 530. And that includes the nest space. The humane farm animal care's density of 1.2 square foot.

MS. OAKLEY: Thank you.

MR. PIERCE: Sure.

CHAIR BEHAR: Dan.

DR. SEITZ: Do you know how long fenbendazole persists in eggs after a flock is

NEAL R. GROSS

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

sprayed and they lay eggs?

MR. PIERCE: That's a great question.

I don't know that. I do know there's some people here from the manufacturer that are sharing I think tomorrow or Friday, Dan. I don't have the detail with that.

And it's actually run in the water. It's a water-based application.

DR. SEITZ: And when your conventional producers use that is there a period of time that they destroy the eggs because there's concern that that may persist in the eggs?

MR. PIERCE: No. The way it's labeled, the way that FDA has permitted it there's no withdrawal period needed for using that product in live hens.

CHAIR BEHAR: Ashley.

MS. SWAFFAR: So in the vaccine document do you feel like there's anything missing that we didn't address that would prohibit you from using a specific vaccine, whether it be state, federal, customer mandated, anything like that

NEAL R. GROSS

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

that's missing out of the?

MR. PIERCE: Nothing comes to mind except my worry is for the certifier, that they do have a method of knowing what is allowed -- what's excluded and what's not excluded methods.

And then helping them understand why this is necessary. So what do we need to do as a certified farm to prove to the certifier that this is a necessary vaccine. This chocolate is not the same as this chocolate because this one is made with this percentage of cocoa versus the other one. That it's not always equal. Just because it has the same name, a salmonella vaccine, doesn't mean it's the same vaccine.

MS. SWAFFAR: Right. And that was part of what we tried to say in our commercial availability in the document was it has to be available in the same form, quality and quantity. Quality was our main sticking factor there.

CHAIR BEHAR: And the way it would be -- some vaccines producers prefer it in the water. Some prefer it as an aerosol. There's a variety.

NEAL R. GROSS

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

Nobody's out there individually using a syringe on 20,000 chickens.

So I have one other question also and that is when you're deciding on a vaccine are you working with a veterinarian? Who are you working with to make that decision?

MR. PIERCE: We are. In our area we have a PADL, Pennsylvania Animal Diagnostic Lab.

So we have three different laboratories that have extension -- poultry veterinarians. We're pretty fortunate. That will help us determine what is the best vaccination program.

Because if you're to -- on my farms there may be different needs based on that region, exposure. We have a lot of poultry in Pennsylvania with turkeys, broilers, ducks. So there's a lot of cross contamination with other vaccination programs. But yes, we do work with veterinarians.

CHAIR BEHAR: Because that was something we didn't put in the document, but we could put in the cover letter that -- a letter from a veterinarian that said that this non-GMO

NEAL R. GROSS

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

equivalent was not really equivalent from a veterinarian.

But I think not just somebody who sells vaccines. It would have to be a disinterested objective third party.

MR. PIERCE: And Harriet, we're fortunate that we do have a strong extension veterinarian ability.

I don't know if there's going to be regions of the country that may not have that. So I just want to help you consider that.

There may be some pockets -- not everybody has 20,000 hens. There's going to be some that are certified with less of course.

CHAIR BEHAR: Right. We're not hearing really a need for this so much from the smaller flocks. So I think anyone of that size would most likely be working with some veterinarian, or have someone that they can go to.

MS. SWAFFAR: We do inject chickens. We do. With needles. And eye drops. There's multiple methods that everybody does.

NEAL R. GROSS

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

We do eye drops. We do shots. We do aerosols. We do water.

CHAIR BEHAR: Anyone else? You really grab 20,000 chickens and hit them with a syringe?

MS. SWAFFAR: Yes.

MR. PIERCE: And there's certain applications that are going to give the immunity, the protection.

So if we're injecting a bird it's very expensive. There's handling and labor. But that's going to be the most effective way to get the immunity to the bird for the vaccine to take.

And there's certain ages. You can't give it at any age. I don't always compare children to animals, but there's certain regimens that we need to follow at certain life cycle parts.

CHAIR BEHAR: Thank you.

MR. PIERCE: Thanks again for everything that each of you are doing.

CHAIR BEHAR: Okay. Johanna Mirenda is next. Don't forget your butterflies. And Roland McReynolds is on deck. And after him is

NEAL R. GROSS

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

Loren Fisher. Thank you, Johanna.

MS. MIRENDA: Hi, I'm Jo Mirenda with the Organic Trade Association and I'll be commenting on the topics of marine materials, paper pots and vaccines.

OTA's comments on marine materials -- on the marine materials discussion document were informed by a new member task force comprised of organic industry stakeholders across the seaweed supply chain.

We took a deep dive into the NOSB discussion record on this subject and identified a further need for science-based environmental impact data that is representative of the countries across the globe where seaweeds are harvested, and information about environmental impacts that are currently being regulated by legal frameworks in these countries outside of the NOP standards.

We encourage the board to continue seeking information to fill these data gaps as a matter of principle for proper development of a policy decision that would ultimately impact all

NEAL R. GROSS

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

seaweeds harvested globally and used as inputs on NOP certified farms across the globe.

We also encourage the board to explore additional opportunities for continuous improvement and sustainable sourcing of inputs used in organic production.

On paper pots regarding the Crop Subcommittee decision to expand the scope of review beyond paper chain pots we agree with this expansion to the extent that it helps you make efficient use of your time and resources to review generic paper planting or seeding aids that are similar to the petitioned material.

But we feel that the scope should be limited to only planting and seeding aids that are left to degrade in the soil so that it's a manageable scope of review and practical for review under the OFPA criteria particularly for evaluating environmental impacts.

And for vaccines we support the Livestock Subcommittee's efforts to clarify and implement the one narrow exception to the

NEAL R. GROSS

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

prohibition on excluded methods and that's GMO vaccines that currently exists in the NOP regulations.

The proposal is effective to add further scrutiny and tighter restrictions on GMO vaccines than what is currently being done under current practices.

It codifies the preference for non-GMO versions. It ensures that producers have timely access to necessary vaccines for preventive healthcare.

And it ensures that certifiers reach consistent determinations about which vaccines are allowed and that producers have a level playing field in accessing vaccines.

To uphold these principles during rulemaking we have identified outstanding issues that NOP could address with certifiers for effective and consistent implementation of your recommendation.

Our full written comments on these and other topics were submitted through the generous

NEAL R. GROSS

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

35-day comment period. And that's an extra 13 days from the last meeting so thank you for hearing the call from the public for a bit more time, and thank you all for your time and service.

CHAIR BEHAR: Steve?

VICE CHAIR ELA: You can probably guess my question on paper. Any thoughts on, I mean, likewise you guys said just leave the annotation similar to the newspaper, but it leaves the door open, and I don't want to leave the door open.

Do you have any thoughts of how we, I mean, we kind of threw out alternative annotative with -- I can never say that word, biodegradation.

And, you know, some, wanting to try and make sure that these actually, you know, that we control what they are and don't get ourselves into trouble.

We recognize we don't want the biodegradable mulch issue and we're very aware of that. But -- because it would be much easier to say naturally based fibers, but we're not going there. Any thoughts on how we could limit it without being too restrictive?

NEAL R. GROSS

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

MS. MIRENDA: So the OTA did not take a position on those specific annotations, so I apologize, I can't give you a fully representative answer.

But in general, annotations are a great way to characterize your intent of what materials you have reviewed to the OTA criteria and are intending to allow under the listing. That's what the old, existing paper annotations were missing, is that full characterization through annotation.

So at this point, I don't think there's an opposition to adding in some criteria around biodegradation, provided that you're limiting your scope only to the production aids that degrade in the soil. I don't think it makes sense for tents, collars. But an annotation that ensures that the synthetic materials that you're approving are degrading in a manner consistent with environmental principles would be appropriate.

The challenge maybe with the ASTM standards is that we haven't fully tested them with the bio-based mulch scenario, so I don't know if

NEAL R. GROSS

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

we have good track records on whether that annotation is the right one. But I think the direction of putting some parameters around biodegradability is an appropriate path.

VICE CHAIR ELA: As a followup to that, I did appreciate your comments about planting aids versus things that aren't meant to biodegrade. I think that was a great insight, and it's like oh, that's a good point.

On the other hand, I also think a lot of those paper products that are not meant to biodegrade are not always removed. And I guess I don't know what the certifiers do in terms of making sure when a collar is put on or a paper cap.

I don't know, Scott, do you have any insight onto that? Are those, I mean, how often are those removed and how often are they left in the field? So I guess I'm not sure that, I appreciate the distinction, because I think it's important. But I also see those things not always removed, and I don't see any requirement that they're removed necessarily.

NEAL R. GROSS

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

CHAIR BEHAR: I note though beyond that, the Organic Produce Wholesalers Coalition had photographs and very fancy, you know, comments, you know, twist ties, and there's numerous other things that never even come in contact with the soil at all.

So I think, you know, we can make that distinction that those things would not be included, even though they could be considered made partially or fully from paper.

But Dave had a question.

MR. MORTENSEN: Yeah, Joe, on the first subject that you addressed, marine materials. I think the Board's in agreement with your statement that we believe that science-based data should guide, you know, guidelines on marine materials.

It's also the case that, and Allison went into quite a bit of detail over the lunch hour, that we make decisions and policy in the absence of a complete data set often.

And so we take expert opinion and perspectives. Some of these marine environments

NEAL R. GROSS

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

are much more deeply studied than other marine environments from which the algae are harvested.

And even in some of the most studied ones, the understanding of the impact on, for example, the cod fishery, continues to be very unclear. So then we're left to ask what, what is our best knowledge inform our thinking about certain practices.

So I guess I would just say we agree that science-based data should inform, but we don't always have all the data we would like to have when we make those decisions. And in my view shouldn't be thinking we should wait until we have every last bit of data, because we will regret having gone down a path way too far before we have that data.

MS. MIRENDA: I will recharacterize that then to say that our industry needs to see enough data to identify the appropriate solution, whether it's organic certification or an annotation or other options. Just enough to make sure we choose the right solution.

CHAIR BEHAR: Emily.

MS. OAKLEY: Thanks for your comments

NEAL R. GROSS

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

and thanks for hosting the task force. And we'd asked to hear from industry and we -- this is the first meeting when we've really heard quite a bit from industry. So thank you for helping to facilitate that.

And as I had mentioned to you before, there is some of that impact data in the 2016 TR.

Some of that can be referenced through previous discussion documents.

And then we receive, as a matter of public record on the public comments, suggestions for peer-reviewed articles. But what I would note is that we might receive a peer-reviewed article stating one position, and another stating a very different position.

So to some extent, it's very hard to even achieve what you're asking for us, because I could find certain journals and peer-reviewed articles that would present one position, and others that would present another. So I hear what you're saying, we will work on that.

But I also think we have to, as I stated

NEAL R. GROSS

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

with the panel, take some degree of the assumption that when you are removing a wild, native species from a wild, native ecosystem, that there is an impact. And our goal is to try to mitigate that and determine what extent of the impact there is.

And of course, that's going to vary by species and geographic area and harvest method and harvester, all of those complexities. But I don't think we want to start with the principle that there is no impact, because there certainly, I think, is.

MS. MIRENDA: Absolutely. And I don't mean to characterize our position as needing more data because we don't think there's a problem. It's truly about understanding the issue on a global scale, because these policy recommendations have a global impact.

CHAIR BEHAR: Thank you. Next up is Roland McReynolds. And on deck is Loren Fisher, and after him is Kelly Pepper.

MR. MCREYNOLDS: Madame Chair, members

NEAL R. GROSS

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

of the Board, thank you very much for the opportunity to speak with you here today, and thank you for your service to the organic community, especially those of you who are going off the Board this year.

My name is Roland McReynolds. I am the Executive Director with the Carolina Farm Stewardship Association, which is a 40-year-old farmer member organization working to build a sustainable agriculture system in North and South Carolina that is based on organic agriculture and local food.

I'm here to speak in support of the Crop Subcommittee recommendation that you add fatty alcohols to the National List as an allowed synthetic substance for sucker control in the production of organic tobacco.

Over the April meeting and this meeting combined, you've received about 40 written and oral comments from organic farmers in support of the petition. There are about 220 organic tobacco farms in the United States, and this spring, people

NEAL R. GROSS

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

representing 169 of those family farms signed a petition in support of the fatty alcohols petition.

The average tobacco acreage of these organic family farms is 39 acres. These are the mid-scale family farms that are fast disappearing in America today, and for whom organic agriculture represents a promise of economic fairness and environmental stewardship.

You've received comments from NC State University faculty documenting their research that there is no non-synthetic material available that provides adequate sucker control in organic tobacco. You've heard from farmers themselves that their experience confirms that research, and that removing 60,000 suckers per acre by hand is economically unfeasible and dangerous for farm workers.

Organic tobacco is a critical part of the system of sustainable agriculture across the Carolinas and Virginia. The crop is well suited to our climate and soils, it is beneficial to crop

NEAL R. GROSS

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

rotations, and it contributes to the diversification of these farms.

Organic tobacco has converted thousands of acres to organic crop rotations in the Carolinas. And these farmers have become the backbone of the organic food supply in our region.

The crops these farmers grow in rotation with their tobacco have made our region the leader in organic sweet potato production, helped launch North Carolina into the top 10 of states in the value of organic production, and fueled a market for locally milled and locally consumed organic cereal grains. All this has been made possible by the availability of fatty alcohols for sucker control in organic tobacco.

These farmers have relied in good faith on this product for the last 10 years, originally based on an understanding that it was not synthetic.

It is essential not only for them, but for the organic food system in the Carolinas. And providing organic farmers access to tools to allow

NEAL R. GROSS

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

them to foster the cycling of resources, promote ecological balance, and conserve biodiversity while earning a fair return on their labors is a fundamental concept of organic certification.

Fatty alcohols is exactly such a tool.

They fully meet the criteria for approval under both Section 6517(c) and 6518(m) of the Organic Foods Production Act, and for these reasons, Carolina Farm Stewardship Association urges you to add fatty alcohols for sucker control in organic tobacco to the National List.

Thank you, and I'm glad to answer any questions.

CHAIR BEHAR: Jesse and then Steve.

MR. BUIE: This is somewhat of an aside. The original petition that was presented was like 700 pages. Can you give us an update? Because fatty alcohol was also used for tomatoes and some other plants. Can you give us an update on that status of that approval?

MR. MCREYNOLDS: Well, I think what was -- I cannot. And I think what was being referred

NEAL R. GROSS

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

to was strictly a research use of fatty alcohols in tomato grafting. But I do not have information about EPA registration of those for any other use.

VICE CHAIR ELA: I'm curious, obviously you've noted, heard from a significant percentage of the growers that grow tobacco. But it's quite regional, and I've, you know, I've been surprised that we haven't heard from growers in Kentucky and, you know, some of these other states as much. Any thoughts as to why that is?

MR. MCREYNOLDS: Two things. There were, people among the 169 people who signed the petition included tobacco farmers in Tennessee and Kentucky.

Number two, those states just aren't as lucky to have Carolina Farm Stewardship Association there to organize them and get their voices heard.

(Laughter.)

CHAIR BEHAR: Anyone else? I have a question.

MR. MCREYNOLDS: Yes.

CHAIR BEHAR: And we discussed this on the telephone.

MR. MCREYNOLDS: Right.

CHAIR BEHAR: Do you see any irony in approving a material that is actually on the prohibited list of materials to use as an input, not as a food or inhaled, but as an input in organic, that this is facilitating the growing of a material that we prohibit?

MR. MCREYNOLDS: Facilitating the growing of a material that you prohibit?

CHAIR BEHAR: Yeah, we don't allow tobacco dust, it's on the prohibited. But you know, as a crop input.

MR. MCREYNOLDS: Well, tobacco is a legal crop and it is legal to be sold, and it is legal to be certified. And it was being grown when OFPA was being passed. And when the regulations were being written, the people who writing the regulations knew there were farmers growing organic tobacco. So we're talking here about a material that is used in growing that crop, and the material

NEAL R. GROSS

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

meets the OFPA standards.

CHAIR BEHAR: Just wondering about the irony. But you're a very forceful advocate, so thank you for your work. And thank you.

Oh, Tom, go ahead.

MR. CHAPMAN: I'm confused, the people you represent, are they growing tobacco for tobacco dust, or tobacco for other uses?

MR. MCREYNOLDS: For other uses. They are not using it for tobacco dust.

MR. CHAPMAN: Thanks for clarifying that.

MR. MCREYNOLDS: Thank you for clarifying that.

MR. CHAPMAN: Yeah, I didn't quite understand the relevance.

CHAIR BEHAR: Yeah, but you never know where it might end up. Thank you.

MR. MCREYNOLDS: Thank you.

CHAIR BEHAR: Okay, next up is Loren Fisher, then Kelly Pepper, and after that Abby Youngblood.

NEAL R. GROSS

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

MR. FISHER: Thank you very much for your time. My name is Loren Fisher, I'm a Professor of Crop and Soil Science at NC State University. Twenty-two years working in tobacco. I think I started in 1997 in tobacco research and extension as an agronomist.

I'm proud to say that production of organic tobacco has resulted in an increase, a significant increase in total acres of organic farmland in several states, and I consider North Carolina an emerging leader in organic farming.

And I'm convinced that the ability to produce organic tobacco and the rotational crops that go along with it have played an essential role in expansion of organic acres in North Carolina and other tobacco-producing states.

As you've heard today, and I agree, use of fatty alcohols is essential for producing organic tobacco. The flower of the tobacco plant is removed as a normal production practice to allow the plant to focus energy in production of leaf instead of seed, and it also contributes to desired

NEAL R. GROSS

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

physical and chemical characteristics of a marketable leaf.

The cultural practice of flower removal in tobacco is unique for a plant production system.

Flower removal results in sucker growth from each leaf axle, as you heard from Dr. Collins, as the plant continues to divert resources in an attempt to produce seed.

As you've heard from others also, a typical tobacco plant has 20-24 leaves and up to three potential suckers per leaf axle. Quick math will tell you that equates to about 60 percent potential suckers per plant, and sucker growth in each leaf axle is not expressed all at one time, yet over a eight to ten week period after the flower is removed.

Hand removal of suckers would not only be laborious beyond reason, but would expose labor to additional hazards and could result in a significant increase for risk of incidents and the spread of at least two diseases that come to mind that affect tobacco.

NEAL R. GROSS

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

Development of products to control suckers in the 1950s is considered to be the single most important innovation that has allowed tobacco to be continued to be produced in a modern agricultural production system, likened to mechanical harvesting developments in other crops.

And in fact, I would guess that sucker control products would be considered more important to the tobacco farmer than a mechanical harvester.

We have conducted research at NC State to evaluate numerous other potential products for use in organic tobacco production for sucker control, and none have provided control at a level that would significantly even noticeably reduce the intensive labor requirements to hand-remove suckers. A summary of that work has been submitted for your review in the record, and I am here to answer questions if you have any at this point. Thank you for your time.

CHAIR BEHAR: Steve.

MR. FISHER: Yes, sir.

VICE CHAIR ELA: We had a, I think on

NEAL R. GROSS

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

the, it was on the webinar, as well as I believe it was in the written record from Sterling Agriculture about a natural product. It's a little unclear, I mean, you know, it was there. But I mean, it sounds like it was also soaps and rosemary oil, citric acid from what I gathered.

MR. FISHER: Right.

VICE CHAIR ELA: Do you -- have you seen that? Do you have any thoughts on it?

MR. FISHER: I did see that record. It's not one I'm familiar with and not one certainly we tested. You know we've -- I brought the list of the ones we have, if -- so paraconic acid, vegetable oil, canola oil, spearmint oil, and peppermint oil are the ones that most recently we've tested. Obviously others in the past, but not that one in particular.

VICE CHAIR ELA: Do you know if it's possible to isolate or develop those, the fatty soaps, the C-8, the C-10 chain, without non, non-synthetically?

MR. MCREYNOLDS: That's a very good

NEAL R. GROSS

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

question. I'm not a chemist, but it's my understanding that's not possible.

VICE CHAIR ELA: Thanks.

MR. FISHER: Thank you. Good questions, though.

CHAIR BEHAR: Ashley.

MS. SWAFFAR: Steve, a point to that. Wouldn't we have to expand the annotation for that soap for it to be allowed in organic use? I believe that was what the commenter was trying to get, that I tried to ask that question.

VICE CHAIR ELA: Say that again.

MS. SWAFFAR: Wouldn't we have to expand the use of that soap to that, was that the commenter that?

VICE CHAIR ELA: Well, I think he said it was an all natural, certified organic product. That's the question. I mean, and he submitted some additional information, which it's still a question. I just -- I don't think there's, well, we can talk about it tomorrow, it's part of the public, but it's an unclear.

NEAL R. GROSS

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

CHAIR BEHAR: Okay. Thank you very much.

MR. FISHER: Thank you very much. Thank you all for your time.

CHAIR BEHAR: Kelly Pepper is next, with Abby Youngblood on deck. Don't forget your butterflies.

MR. PEPPER: To begin, I want to thank the Board for your countless hours of service to the organic community. I'm Kelly Pepper, Manager of the Texas Organic Marketing Co-op in Lubbock, TX.

Our members have historically produced a large majority of the organic cotton grown in the U.S. I'm here today because it is essential for U.S. organic cotton production that you renew the inclusion of hydrogen chloride for delinting cotton planting seed on the National List.

The original petition for hydrogen chloride was filed by a cooperative back in 2002 because its use is critical to our farmers being able to grow organic cotton on a commercial scale.

NEAL R. GROSS

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

Through the years, we've detailed to the Board possible new delinting methods that we hoped would eliminate the need for the use of hydrogen chloride, but currently there's still no commercially available alternative.

We continue to monitor the research on mechanical delinting. But at this time, it has run up against some obstacles that have stalled its advancement. Unfortunately, with only 25-30,000 acres of organic cotton in the U.S., there's not a great incentive for investment in the research to overcome these obstacles or to develop an alternative method. Therefore, we urge you to renew the inclusion of hydrogen chloride on the National List.

In closing, I'll leave you with this: it takes approximately one ounce of hydrogen chloride to delint the seed for an acre of organic cotton, and that's neutralized with calcium carbonate. But if that acre reverts to GMO cotton, six to eight pounds of active ingredients of pesticides and 100 to 500 pounds of chemical

NEAL R. GROSS

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

fertilizer will be applied.

Thank you.

CHAIR BEHAR: Ashley first, and then Steve.

MS. SWAFFAR: So you said there's 25-35,000 acres of cotton in the U.S. What percent of that do you represent, your co-op?

MR. PEPPER: Somewhere 50-60 percent at this time. There's been, historically we've been 85 or 90, but there's been some growth outside of our co-op in the last couple of years.

MS. SWAFFAR: And sorry, followup question, without this material, what would happen?

MR. PEPPER: I don't think there'd be any organic cotton.

MS. SWAFFAR: Great, thank you.

CHAIR BEHAR: Steve.

VICE CHAIR ELA: I'm curious what obstacles you've run up against. I mean, some of, I mean, we've reached out, I'm confident that what you're saying is true. But I'm, just from a future research needs and our research priorities, it

NEAL R. GROSS

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

sounded like it was hopeful in the mechanical, but what walls have we hit?

MR. PEPPER: Well, two things that have been, have come up in the last year or so. One, the delinting serves as a fungicide. So the seed companies don't have an alternative if they don't have that to take care of that aspect.

The other is if they produce seed in the southern hemisphere and are trying to bring it to the northern hemisphere, the acid kicks it out of, I can't think of the word, but anyway.

The other thing, I think there are some people that really would hate to see delinting available at every gin in cotton country. It would vastly increase their problem of policing their patents. And the seed companies are who we need to pull this through on a commercial scale for widespread cotton seed use. So I don't know that they really want to see it happen.

CHAIR BEHAR: I want to thank you, too, for your detailed written comments. And I have been to Lubbock, TX, and I believe I've been to

NEAL R. GROSS

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

Laurea Pepper. I'm not sure she -- how she's related to you.

MR. PEPPER: My sister-in-law.

CHAIR BEHAR: Sister-in-law, and I've seen how chemically intensive conventional cotton is. And so it's very important to keep organic cotton out there. So thank you.

MR. PEPPER: Well, thank you.

CHAIR BEHAR: Abby Youngblood is right now, and Alice Runde is on deck, with Anne Ross after that.

MS. YOUNGBLOOD: Hi, I'm Abby Youngblood, Executive Director at the National Organic Coalition, and I want to thank the Board for the tireless work that you do to protect the integrity of the organic seal.

Soil health is at the heart of organic farming. Research has shown that if the standard practices used by organic farmers to maintain and improve soils were implemented globally, it would increase soil organic carbon pools by an estimated two billion tons per year, the equivalent of 12

NEAL R. GROSS

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

percent of the total annual greenhouse gas emissions worldwide.

Organic regulations require that organic farmers feed the soil, not the plant. In the spirit of continuous improvement, the National Organic Coalition is asking that the NOSB give more scrutiny to the use of highly soluble nutrients in organic. Highly soluble nutrients should be regulated by being added to the list of prohibited naturals with an annotation to limit their use.

We request that the NOSB add this as a work agenda item to ensure that soil building and carbon sequestration processes are the heart of organic production.

Gene editing is a form of genetic engineering that has always been prohibited by the organic regulations. Thank you, Dr. Tucker, for clarifying today that this is the National Organic Program's position. Organic farmers and consumers do not want GMOs, and any future effort to allow products of genetic engineering will be met with massive opposition. The organic community is

NEAL R. GROSS

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

united on this issue.

The NOSB has already reviewed, with numerous opportunities for public comment, gene editing techniques and recommended unanimously that they remain prohibited in organic.

We urge the NOP to implement the NOSB's 2016 excluded methods recommendation through guidance as soon as possible. This board must continue to have the ability to evaluate and clarify for certifiers and organic stakeholders which genetic methods are allowed and which should be prohibited under the organic regulations based on the excluded methods definition, as well as the criteria laid out in the NOSB's 2016 recommendation.

NOC supports the proposal to add induced mutagenesis developed by use of in vitro nucleic acid techniques as an excluded method, and we also support the addition of embryo transfer or embryo rescue in animals to the table of not excluded methods where there is no use of hormones in either the recipient or the donor animals.

NEAL R. GROSS

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

Finally, we appreciate leadership from Deputy Administrator Jenny Tucker and communicating and engaging with the organic community. And your participation in pre-NOSB meetings over the past year in Seattle and St. Paul demonstrates your commitment to listening to and working with a broad range of stakeholders on the issues that are top of mind.

We encourage the NOP to continue this engagement with stakeholder groups to facilitate problem solving, collaboration, and mutual trust.

Thank you, Board members, for considering these comments.

CHAIR BEHAR: Thank you, Abby. No questions. Oh, I'm sorry, Asa has a question.

MR. BRADMAN: I wanted to bring the discussion back a little bit to your comments on celery powder. And I don't want to sound snarky, but yesterday your -- at that NOC coalition meeting, there was handing out, you know, meat sticks that are both cured with celery powder.

(Laughter.)

NEAL R. GROSS

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

MS. YOUNGBLOOD: Yes.

MR. BRADMAN: And I wasn't sure if that was intentional or not, or if it was kind of an endorsement. And you know, I think this speaks to kind of some of the issues. You know, I totally agree that the labeling as uncured for use of celery powder substitute for nitrate is inappropriate. There's also food safety benefits to using, you know, the celery powder materials.

And I guess the question is, I mean, I think the message we heard earlier is that these products shouldn't exist. And if there's no alternative. It seems, from what I can see, there was basically sodium chloride, salt, or nitrates.

I haven't seen alternatives to this. There's a long, you know, decades, centuries, history of using, you know, nitrate products in meat curing.

And I'm just curious, is there any room here for, you know, what room for discussion there is. And I think we'll also hear that there's going to be more research on organic celery as a source for celery powder.

NEAL R. GROSS

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

But again, there's this larger issue of processed foods. And I think many of us have kind of a, you know, a certain resistance to the idea of organic processed foods, you know. Ergo, the we don't want an organic Twinkie. So thanks.

So I am curious to hear your response and comments.

MS. YOUNGBLOOD: Yeah, and I may want to get back to you after talking with some of our coalition members about the issue, because I haven't been intimately involved in those conversations. But I do understand that it's NOC's position that we want to see organic celery powder used rather than conventional. And that some of our members, Consumer Reports has been kind of leading the charge to do something that's not at the level of this board but at the FDA level to get at that issue you were talking about, about the labeling of something as uncured. So that's kind of a separate issue, but related to what we're talking about.

CHAIR BEHAR: Dave.

NEAL R. GROSS

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

MR. MORTENSEN: Abby, thank you for the NOC document that you and your colleagues prepared.

I wonder if you could just take a minute or minute and a half to walk us through why it's so important from NOC's perspective that we implement through guidance the 2016 recommendation, as opposed to leaving it a recommendation that's not been implemented through guidance. What's the advantage?

MS. YOUNGBLOOD: Right, and I think one thing that's important to say at the outset of that conversation is the determinations made by the Board on genetic methods are based on the existing definition of excluded methods in the regulations.

And that guidance document, after several issues came before the Board that were issues that just weren't clear, there was further examination of which genetic methods were excluded and which were not. And so that 2016 recommendation really clears up that confusion that had existed before then, and it was the result of

NEAL R. GROSS

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

years and years of work and public input from stakeholder groups.

And so I think it's already been said by many folks throughout the day today that we just need that clarity from one certified to the next as to which techniques are excluded and which are not.

And so gene editing is one of I believe ten or eleven that are on the terminology chart as excluded. And those exclusions are based on the existing regulations, but also that deeper dive that the Board took to kind of clarify.

And it's also important to note, as Harriet stated, that there are, I think it's three methods that have been determined as not excluded.

So that clarity is also critically important. And for organic plant breeders, they need to also know where that line is and what's not excluded so they can continue to do the work that they're doing to develop seeds that are adapted for organic systems.

MR. MORTENSEN: Thanks, Abby.

NEAL R. GROSS

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

CHAIR BEHAR: Thank you, Abby. Alice Runde, Anne Ross on deck, and after that Roland Cargill.

MS. RUNDE: Good afternoon. Thank you. My name is Alice Runde, I'm the Coalition Manager for the National Organic Coalition. My comments today pertain to sanitization materials, rules around their enforcement, enforcement of dairy rules, the strengthening organic enforcement rule, and the under-representation of farmers of color in the organic movement.

NOC urges the NOSB to continue to pursue an assessment of cleaning and sanitization materials using organic crop, livestock, and handling. Every time the NOSB receives a petition for the new sanitizer -- for a new sanitizer, we are reminded of the value of an assessment tool that would aid the NOSB in determining which materials should be added to the National List.

Furthermore, this assessment may help identify areas where there are gaps in necessary sanitizers or disinfectants which aid in the

NEAL R. GROSS

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

promotion of food safety. Take a Dr. Tucker big breath here.

(Laughter.)

MS. RUNDE: In regards to the dairy sector, first, NOC strongly supports the immediate implementation of the origin of livestock rulemaking for which there was -- there is broad support from the organic community, and a fall 2018 unanimous resolution from the NOSB. And we really appreciate the work that has been done in that direction.

Secondly, in some cases, as mentioned this morning, dairy enforcement is still falling short, and some large operations continue to not comply with parts of the organic regulations that pertain to the management and care of organic dairy livestock, such as denying their animals meaningful access to pasture.

NOC urges the NOP to bring bad actors in the dairy sector and their certifying agents into compliance or exclude them from the Program.

We appreciate the work the NOSB is doing

NEAL R. GROSS

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

on import fraud and recommend the NOSB continue that work to ensure that the USDA is taking necessary actions to reduce imports of fraudulent grains and in other areas where there is a risk of fraud in the organic supply chain. A sustained focus on this issue from the NOSB and the organic community is essential to address this multidimensional challenge.

NOC is encouraged that the NOP is planning on publishing the strengthening organic enforcement proposed rules this fall. NOC supports the requirement for electronic import certificates for all imports, closing loopholes in supply chain traceability by requiring additional handlers and brokers to become certified, requiring more frequent unannounced inspections for operations in regions where increased risk has been identified, and making product and acres reporting mandatory for certifiers.

Finally, the 2012 Act census and the 2017 Act census data shows that people of color

NEAL R. GROSS

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

are under-represented in the organic movement. We recognize that the organic movement and organic certification has not been equal across racial groups.

Systematic racism has kept our movement from reaching its full potential. The organic movement can only be stronger and better positioned to meet future challenges if it represents diverse participation.

NOC encourages the NOSB to prioritize research into barriers to participation in organic certification for farmers of color and a lot more.

Thank you.

CHAIR BEHAR: Jesse, you have a question?

MR. BUIE: No, just a comment. I appreciate that sensitivity. And I'd also like to add that the solution to that is kind of multifaceted. So it is -- it's not straightforward just one side.

MS. RUNDE: Yes.

MR. BUIE: And so you know, I'm looking

NEAL R. GROSS

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

forward to us, you know, doing a little more work into that, so --

MS. RUNDE: Great.

CHAIR BEHAR: Tom was next, and then Emily.

MR. CHAPMAN: Yeah, on your last topic of under-represented populations in organic farming, thank you for bringing that up. It's clearly an issue as you look around this room. I'm curious to know what activities NOC or NOC members have done in this area as well to start addressing this issue.

MS. RUNDE: So six months ago we started a racial equity committee, which is not very diverse. But we're asking ourselves these questions, right, like what are we doing to work towards a more broader movement. We all agree that our values as organic should be diversity, right.

A monoculture -- we're against monocultures, as we were talking about yesterday.

So we have a racial equity committee that is discussing these questions of what do we

NEAL R. GROSS

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

do next. Like what is our position as mostly white, middle class people who were born in the U.S., what is our role in this, and how do we diversify and become more representative of who we should be representing.

MR. CHAPMAN: Thank you. Keep me apprised personally as I sunset off this board. I'm really interested in this subject, and I'm interested in seeing how even industry can contribute to it.

MS. RUNDE: Great.

CHAIR BEHAR: Emily.

MS. OAKLEY: Yeah, and speaking of members sunsetting off the Board, I hope that the Secretary of Agriculture will appoint diverse members to the Board and that we continue to have and increase the representation of diverse stakeholders on this board.

The room doesn't also represent the consumers that I see at the farmers market or my CSA. So I think we want to be sure that this board and the room in general represent the widest

NEAL R. GROSS

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

stakeholders within the organic community.

CHAIR BEHAR: Thank you. Oh, Sue, sorry.

MS. BAIRD: Just a comment, and I'm not sure this is totally pertinent, but the work that I'm doing teaching organic agriculture in prisons, many times they are downtown, urban, young black men, and I see lives changed. But I also hear from those same young men, I call home and I tell my family I'm going to be a farmer, and families say to them, you're going back to slavery. Yeah.

And so I think it's a multifaceted issue, not just from old white woman side, but also from the diverse population side. And yet I see lives totally changed and communities changed when these young men go back to their communities and teach them that they don't have to be on the streets selling drugs and pimping and whatever they're doing that ended them up into prison. So I applaud this issue, and yeah, I'd like to stay involved with that as well. Thank you.

MS. RUNDE: Great. Thank you.

NEAL R. GROSS

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

CHAIR BEHAR: Thank you. Anne Ross, and then Roland Cargill on deck, with Alan Lewis after that.

MS. ROSS: Good afternoon, my name is Anne Ross. I am the Director of International Policy for the Cornucopia Institute. I'd like to say a few words here about import fraud.

First, there are a lot of people here who've worked hard on this issue, and their efforts should be recognized and appreciated.

Since I started looking into import fraud, I've considered myself an advocate for organic grain farmers. It's my job to ask questions and to keep pushing, and I'm really trying to understand a few things so all of us can figure out how to address these issues.

Let's say that a ship is coming in loaded with organic grain. The importing companies and/or the producers are certified. But their certifier was recently suspended, let's say in Europe. There is no question that European authorities determined the certifier wasn't

NEAL R. GROSS

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

following the law.

Assume the ship is now at a U.S. port.

I would genuinely like to know what is required to get our inspectors and agency officials out there to look at the paperwork, test, ask questions, do whatever needs to be done to make sure the cargo is organic.

I don't know of any regulatory standard that requires near-absolute proof of wrongdoing to initiate an investigation. In fact, the NOP has wide discretion to order inspections. I understand that operations remain certified for a period of time when their certifier is suspended.

But who is looking at those operations that continue business when their certifier certainly wasn't?

These operations are continuing to push product out into the marketplace. Are we relying on the next certifier to investigate retrospectively? I don't think that happens. I'm really trying to understand where enforcement is at this critical stage.

NEAL R. GROSS

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

Second, I'm going to say this again.

The crooks are still crafty. Importers are creative in using certain import codes to avoid detection, changing shipping routes, and misrepresenting where grain was grown. We've got to make sure we have an accurate account of what's actually coming in so we can determine if imports from a certain region are really down.

We've got to make sure we have a handle on the trading practices of related companies, these companies essentially buying and selling to themselves. These are large, multinational companies in control of entire supply chains.

Finally, in thinking about what I would say here today, I asked a friend of mine, an organic grain farmer, what he'd like you to know. He said, I'm still worried. I feel like everybody is tired of hearing about this, that it's a tired topic. Well, I'm tired, but I'm still at it.

To sum it up, this issue isn't going away, this is not done. Our farmers aren't resting, and neither can we. Thank everybody here

NEAL R. GROSS

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

for all of your work. Any questions?

CHAIR BEHAR: I just encourage you, when the rulemaking on enforcement comes out, looking forward to your scrutiny on that and helping us with that.

MS. ROSS: Thank you.

CHAIR BEHAR: Next up is Roland Cargill, with Alan Lewis on deck and David Gould after that.

MR. CARGILL: Good afternoon, my name is Roland Cargill, I'm with Fair Products. How you all holding up?

(Laughter.)

MR. CARGILL: It's been a long day, hasn't it? You've had to process a lot of information today, and so I'm going to wish you every success in your decisionmaking.

Today, I'm going to focus my comments on the support of the fatty alcohol approval by the Board and for its use on organic tobacco, as well as the inclusion on the National List.

As you know, the Board had utilized

NEAL R. GROSS

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

seven criteria to evaluate the fatty alcohols. Six of seven of these criteria have undergone a thorough and comprehensive review and are published in the technical review report. And the evaluation is very favorable for and supports fatty alcohols.

The seventh criteria, which was compatibility with sustainable agriculture and organic agriculture, was not addressed in the technical review, but was the reason for denial of the previous petition. This denial was done without any rationale or reasoning for the decision.

But fortunately, subsequently the NOSB Crop Subcommittee, in their July report of this year, clearly reported that the fatty alcohols are compatible with sustainable agriculture. Therefore, we're now on the same page, and on this important point. And I'd like to see the Board to move forward in the approval of the fatty alcohols for organic tobacco and the addition to the National List.

Finally, I'd like to point out that the

NEAL R. GROSS

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

EPA has recently reclassified fatty alcohols to biochemicals, based on the following criteria: they're naturally occurring, they're nontoxic, they have a nontoxic mode of action, and they have a safe history of exposure to humans. So the fatty alcohols are no longer grouped with traditional pesticide, but are now grouped with natural products and microbial products.

And this reclassification is consistent with the criteria that's been evaluated in the technical review. So I wish you all success in your decision, and I respectfully ask for your support in approving the fatty alcohols. Thank you. I'll entertain any questions.

CHAIR BEHAR: Thank you.

MR. MORTENSEN: Harriet, I just have one quick one.

CHAIR BEHAR: Okay.

MR. CARGILL: Speak up a little bit.

MR. MORTENSEN: Yes, I will. Thank you, Roland. Like Steve, Steve Ela, I wanted to, as others did, thank you and your colleagues for

NEAL R. GROSS

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

getting up here today and for all the comments on the public comment.

I did want to be sure that you and your colleagues understood that when we're looking at decisions and reviewing these materials, we do it with the data that we have, coming back to the data discussion that we had earlier, and we did not have very much.

So as the Board has asked for more efficacy data, for example, you know, that helps us to make informed decisions. If we don't have that data, then we're just saying, oh, maybe this might work well.

So to your credit, but it wasn't something that we had initially. So if there was a sense that we weren't being evenhanded early, we had much less to review and have a lot more to review now to inform the decision process.

MR. CARGILL: I think the reclassification by EPA is very important. It was done, and I have -- for those of you who have not seen the written comments, I have included that

NEAL R. GROSS

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

up over that document. And it's the letter, the official letter by EPA, as well as with my long-winded comments that I weren't able to make today. But all the details are in those reports.

All right, thanks.

CHAIR BEHAR: Thank you. Is Alan Lewis here? Alan had to leave. So let's move on to David Gould. After that is Jake Dunevant.

Thank you. Hi, David.

MR. GOULD: Hi. Thank you very much for hearing me and thank you all for your very important and diligent and interested service to all these very complex subjects.

My name is David Gould. I'm the Global Head of Sustainability Programs for FoodChain ID.

We operate a number of programs, one of which is the accredited certifying agent BioAgricert. We certify about 1,000 operations to the NOP and about another 12,000 globally to other regimes around the world.

And I'm here to talk to you about integrity of seed, planting stock, and other

NEAL R. GROSS

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

genetic resources, livestock breeds, or potentially anything else that may be involved in organic systems.

And in particular, I want to address the new and growing wave of gene edited varieties and similarly created varieties that were recently recommended as newly excluded methods under the NOP. And we strongly agree with those NOSB recommendations and the prevailing sentiment expressed in this room today by USDA, that these are indeed excluded methods and we reiterate that non-GMO is a critical organic differentiator in the marketplace.

But even if we keep all -- stay in agreement about that, that these new methods are excluded, we have to be aware, they're still happening outside of us. And I speak here today really from one of our other core competencies, which is namely in GMO detection, risk assessment, analysis, and control.

Our company was actually the first to develop GMO detection techniques, back in the early

NEAL R. GROSS

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

1990s, and we keep staying abreast of the technologies and the methods for this. We operate a number of non-GMO verification type of programs around the world and we keep serving the organic sector in this way.

NOP guidance on seeds recently, guidance 5029 said that it was important that if non-organic varieties were going to be used, they had to be documented as not being from excluded methods.

Well, in order to make that documentation meaningful, we need to have some concrete tools to do that, and that means, really, that we need to be able to test for them.

In order to be able to test for them, it means that we need very basic information about, one, enough transparency about what the exact changes are in these novel genomes, the techniques used to create them, and what full disclosure on any of the known phenotypic changes are.

And two, access to the actual genetic material, so that it can be tested, again, compared

NEAL R. GROSS

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

to the reference genome, so that we can know whether it's actually present or not. If we have these things, these things will be detectable.

So, even if no organic operations use these GMOs, if they're only used by operations outside the NOP, I would suggest that it's within the NOSB's purview on this topic to recommend to USDA the necessary tools that the certifiers, the operators, and their service provides, and USDA itself can have to make sure that they do the job to the best of their abilities and protect the organic seal. Thank you.

CHAIR BEHAR: I'm not seeing any questions. Go ahead, Dan.

DR. SEITZ: So, what you're mentioning is a type of transparency around these substances, what are the current blocks to that transparency?

MR. GOULD: Well, there is some resistance among the biotech sector to not be fully transparent about what they're actually creating. These are proprietary genomes.

There's also a lot of -- especially with

NEAL R. GROSS

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

the new national bioengineered food disclosure standard, we actually get a variety of inquiries through our program, saying that this is a non-GMO according to that rule, therefore, you guys should certify this or verify this as non-GMO. We don't go there.

But that's -- really, in the biotech sector, in the laboratory sector, there's a heavy debate about how much information should be available. And it really will be a, more than NOP discussion about the divulgence of this kind of information.

DR. SEITZ: So, are there currently legal impediments to that? I mean, are there laws that protect these companies from divulging this, or would the USDA have the authority somehow to seek that information out?

MR. GOULD: I think the USDA would have the authority, just -- the discussion is still underway. So, the time to be proactive on this is now, before it becomes a problem.

CHAIR BEHAR: I agree with you very

NEAL R. GROSS

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

much, I think it's always a good idea to get ahead of the issue, rather than try to solve it later.

So, but there have been some discussions amongst different genetic testing organizations, that they say that they're developing methods, but it certainly would be easier if they weren't kind of playing hunt, in -- needle in the haystack kind of thing, and find that genetic material themselves and then, create that baseline for testing. It would be better if it was transparent, I absolutely agree.

MR. GOULD: Yeah, absolutely. I mean, there are some people who say that, for instance, that not everything will be detectable or it will be identical to what happens in nature, so you won't be able to tell the difference. But the more that discussion has gone on, the more it's been -- it's becoming more and more commonly understood that that is actually not the case, that these will be detectable, that they are different qualitatively from the naturally occurring analog of it.

CHAIR BEHAR: Thank you for bringing

NEAL R. GROSS

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

that issue up to us.

MR. GOULD: Thank you for hearing me.

CHAIR BEHAR: Okay. Next up, Jake Dunevant, with Cindy Phillips, Kate Mendenhall, and Gwendolyn Wyard rounding out the day.

MR. DUNEVANT: Good afternoon, my name is Jake Dunevant and I work for JTI Tobacco Company.

And I'm also here to talk about the importance of fatty alcohols, from a company standpoint.

The last couple months that all these reviews have been going on, I've been getting a lot of questions from growers, asking what's the alternative, what can I use if I don't have this?

And I don't really have an answer for them.

And that's just, I mean, like Loren Fisher and all them state -- they really emphasize that we test a lot of other things and none of them have the effectiveness as fatty alcohols.

And I really don't -- I've heard a lot of them say this, and from personal experience, I don't think that anybody -- a lot of people are going to continue to grow organic tobacco if they

NEAL R. GROSS

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

don't have this material. And that's -- if there's any questions, I'll be glad to try to answer them.

CHAIR BEHAR: I guess no questions, thank you.

MR. DUNEVANT: All right, thank you.

CHAIR BEHAR: Cindy Phillips, Kate Mendenhall, Gwendolyn Wyard, in that order.

MS. PHILLIPS: Hi, I'm the CEO and founder of Hemp Analytics. It's a startup tech company in the hemp industry. I'm also a Research Scholar at the University of Maryland Business School.

And I'm here to ask the USDA Organics Board help in hemp. So, there has been seized loads across the country, law enforcement officers can't tell the difference between legal hemp and illegal marijuana.

Our company has developed a track and trace technology that allows us to track plant material back to the original lot and the GPS locations of that lot. We have this chemical barcode that is sprayed onto the plant, that becomes

NEAL R. GROSS

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

a tamper-proof label once it dries.

There's permutations of the biochemical barcode that won't pass organic certification, but there's permutations that would. We need help from the USDA organic board on developing further research, about how to set up further experiments on creating permutations of the chemical barcode that would pass organic certification.

And then, we're integrating this into blockchain technology to protect against fraud. And we need to know the total number of chemical barcode permutations that would pass organic certification, to put into our model.

The biggest barrier blocks to setting up our models is government responses and feedback.

We need feedback from all levels of government officials, local, state, and federal, to develop the parameters, conditions, and rules of the model, so that we can simulate real world conditions of fraud cases.

So, I'm here asking for both logistical

NEAL R. GROSS

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

help from the USDA on getting responses from other government officials, and collaboration on setting up further research projects that further develops the chemical barcode. And then, scale wise, we can scale this technology to address organic, what's more at heart with the organic board.

So, I know that people have been switching non-organic material or plants with organic plants, and with this barcode technology, you're able to stop that fraud, because you're able to track the plant material in a realtime data ledger.

But like I said, we need the government's help to get this technology to the marketplace and that is really our biggest barrier.

Thank you.

CHAIR BEHAR: Any questions? Doesn't look like it. Okay. No? No questions?

MS. PHILLIPS: I'm sorry, did you have questions for me?

CHAIR BEHAR: No.

MS. PHILLIPS: So, would I be able to

NEAL R. GROSS

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

get any help from the USDA organics board in developing further research projects on the chemical barcode or any sort of logistical support?

CHAIR BEHAR: Well, we're still waiting -- we did have a discussion earlier about that, with the latest Farm Bill, we're still waiting for the USDA to kind of come up to speed with the allowance, federally.

So, right now, there are people at the state level, I believe in California, they're looking into kind of approving organic hemp. But because it's not federally approved currently, as a crop, that we as a federal board cannot really work on hemp or marijuana --

MS. PHILLIPS: Hemp is --

CHAIR BEHAR: -- or whatever.

MS. PHILLIPS: -- federally legalized with the Farm Bill.

CHAIR BEHAR: No, but the USDA has not caught up in their regulatory --

MS. PHILLIPS: Right, okay.

CHAIR BEHAR: -- to do anything.

NEAL R. GROSS

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

We're kind of --

MS. PHILLIPS: So, I think --

CHAIR BEHAR: We're kind of in a limbo land right now, ourselves. So, until they came out with a regulatory framework to allow it as a federally approved crop, it's harder for us to deal with. Maybe Scott knows more.

MR. RICE: I think it's -- as you noted, it's federally legal crop, but the way in which it can be marketed using the organic label has had additional requirements around it, and that is what is being worked out through USDA rulemaking.

MS. PHILLIPS: So, let's set aside the hemp thing, we need to get permutations of the chemical barcode that would pass the organic certification, because it's going to take three years on our part to bring this technology to the marketplace anyways, and by then, I'm sure the USDA can figure out what protocols that you're going to have in place.

But at that time, the market is full of farmers who care about having organic

NEAL R. GROSS

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

certification. So, if you want to coordinate together on bringing this technology to the market, and also developing good protocols, then please get back with me.

CHAIR BEHAR: Yes. So, there are research dollars -- this Board reviews materials for use. So, if you had something that you wanted to use in organic, I encourage you to go to our website, the USDA National Organic Program website, and there is a petition process for a generic material.

And then -- that's the kind of process that we go through in what type of materials are allowed in organic. We don't really have a way to help fund or provide you with help in researching items, we look at items that are already ready to go.

MS. PHILLIPS: Okay, thank you.

MR. MORTENSEN: Harriet, another -- just another quick thought. The Small Business Initiative Research Competitive Grants Program, it sounds like a good fit --

NEAL R. GROSS

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

MS. PHILLIPS: I just --

MR. MORTENSEN: -- for that.

MS. PHILLIPS: -- applied to that today, actually.

MR. MORTENSEN: Okay, good.

MS. PHILLIPS: Thank you.

MR. MORTENSEN: Great.

CHAIR BEHAR: Thank you, Cindy. Kate Mendenhall, on deck. Don't forget your butterflies. And Gwendolyn Wyard, on deck.

MS. MENDENHALL: Thank you, Members of the National Organic Standards Board, for the opportunity to speak before you today. My name is Kate Mendenhall. I'm the Director of the Organic Farmers Association, and I'm also an Iowa organic farmer.

OFA is led and controlled by domestic certified organic farmers and only certified organic farmers determine our policies, using a grassroots process. We believe organic farmers were instrumental in creating our successful organic market, and must be leaders in directing

NEAL R. GROSS

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

its future.

Organic Farmers Association greatly supports the work of the NOSB and finds your role crucial to maintain integrity in the USDA organic label. We also support NOSB recommendations moving forward to rulemaking or guidance in a timely manner.

We appreciate the NOSB's 2018 resolution to move origin of livestock standards quickly to a final rule, and the USDA's recent decision not to issue a second rule. We are concerned that the number of comments coming in might delay the process, and we ask that the USDA work to move to an immediate implementation of a final rule.

We are also hearing from farmers that they still see a lack of oversight on pasture rule compliance. We appreciate the increased dairy oversight effort, and we need to see more.

Last month, we sent a letter to the Secretary of Agriculture in response to Undersecretary Ibach's July statement expressing

NEAL R. GROSS

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

interest in a dialogue about gene editing in organic. Seventy-eight organic organizations joined OFA to clearly communicate our unified opposition.

We thank Dr. Tucker for confirming that gene editing has always been prohibited in organic agriculture. The organic community is not interested in a dialogue about gene editing. We do encourage robust dialogue about the numerous critical issues organic farmers are facing, protecting farmers from genetic and pesticide contamination, protecting farmers from import fraud, et cetera.

Organic Farmers Association continues to oppose the certification of hydroponic operations, a position passed by 90 percent of our certified organic farmer members nationwide, and in each of our six geographic regions.

We are concerned about the consequences to the integrity of the organic label as a result of the USDA and NOSB moving forward to allow organic hydroponics without clarity on how it complies with

NEAL R. GROSS

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

OFPA and standards for this type of production system.

At the spring NOSB meeting, there was much conversation regarding whether container farms needed to comply with the same three-year transition as soil-based farms. Organic Farmers Association was pleased to receive NOP clarification for certifiers on transition time for container systems after the application of a prohibited substance. However, it did leave some ambiguity about how greenhouse production fits in.

Is a three-year transition needed for a container system inside a greenhouse after application of a prohibited substance?

It is important that the organic standards are clear and equitable across growing systems so that certifiers are implementing and enforcing the standards uniformly. If ambiguity is present, the NOP must provide clarity. Thank you.

CHAIR BEHAR: Thank you. I have Dan.

DR. SEITZ: Just, if hydroponics

NEAL R. GROSS

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

continues as an acceptable organic method, are there certain crops that you think will disappear from soil production? Because of a difficult competitive environment?

MS. MENDENHALL: I don't think that there has been an economic assessment of that, but I still encourage the NOSB to show evidence that hydroponic operations comply with OFPA.

And we continue to hear from farmers a strong opposition to it, and I think that the comments submitted, which actually were not solicited by us, to the NOSB, show that there still is a lot of concern about that. And just in the short while, I think, since that conversation started, we've seen some interesting and questionable practices being implemented. So, there really needs to be a lot more conversation.

We asked at the last NOSB meeting that moratorium be put on any new hydroponic operations until there can be more discussion and a real vetted process.

DR. SEITZ: Thank you.

CHAIR BEHAR: Thank you, Kate.

NEAL R. GROSS

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

MS. MENDENHALL: Thank you.

CHAIR BEHAR: Gwendolyn is our last speaker. And then, Jenny will have some comments.

MS. WYARD: Okay. Well, good afternoon. Gwendolyn Wyard with the Organic Trade Association, and 95 percent of what I'm wearing is organic cotton.

(Applause.)

MS. WYARD: All right. Well, I thought I would be a little bit more illustrative in my comments this round, because I think we can all use a little bit more color this time of day. My first topic is celery powder.

And I'm excited to announce that after four years of work and two previous submissions to USDA's Research and Extension Initiative Grant Program, we've finally been awarded just shy of \$2 million to develop an organic alternative to natural celery powder. That's \$1 short, Tom said he was going to put that up.

So, celery powder continues to be the only natural form of nitrate available for curing

NEAL R. GROSS

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

meat, such as bacon, ham, sausage, and hot dogs.

Love them or hate them, eat them or avoid them, removing celery powder from the National List doesn't take the celery powder out of organic processed meat, it does remove those products from the store shelves altogether. It eliminates consumer choice and it will negatively impact the already struggling organic livestock sector.

The research underway is focused on developing an alternative that is compatible with organic production systems, compatible with organic principles. So, please retain celery powder on the National List and give us the opportunity to develop an organic choice.

On to dairy cultures, we understand that the intent of this proposal is to eliminate redundancies, and we think that's great, but the sunset vote is not the place to get this done. We recommend a separate recommendation, if you're going to take that approach.

Furthermore, we've also heard from some of our member companies that, right now, dairy

NEAL R. GROSS

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

cultures on the National List can easily be cross-referenced with how they appear on the ingredient statement of a product. And this is important to those ingredient label consumers. So, from this perspective, we encourage NOSB to join us in our support for food label literacy and food label transparency, and retain dairy cultures on the National List as a separate listing.

And then, finally, on genetic integrity of seed, we have an ongoing request for NOSB to please focus on recommendation for guidance on GE testing.

Ironically, after years of discussing genetic integrity and the need to keep GMOs out of organic, NOP's guidance on residue testing is out of date and it's completely void of procedures and criteria specific to GE testing.

Advising the Secretary on residue testing is one of the seven NOSB duties, explicitly defined by the OFPA, and NOP clarified that GE testing does in fact fall under the residue testing requirements. So, please add this to your work

NEAL R. GROSS

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

agenda.

And then, finally, I want to thank Ashley, Tom, Lisa, and Harriet for your absolutely outstanding service. I've put together some cartoons that made me think of each of you. Feel free to ask me why I decided to assign you to these various cartoons.

I've got a couple seconds here, so I'll start with Ashley. Either way you look at it, my friend, we're plucked. Just maybe it's obvious with all of the work that you've done on the livestock issues. And I'll stop there. Thank you.

CHAIR BEHAR: Well, I think the Crops, or maybe it would be the Certification Subcommittee, might talk about improving the residue testing policy memo.

MR. RICE: Sorry, I thought we were talking about comics, you caught me off guard.

(Laughter.)

CHAIR BEHAR: I was. Well, I --

MR. RICE: I was trying to make the

NEAL R. GROSS

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

connection there. Yes, we could look at doing that.

CHAIR BEHAR: Ashley?

MS. SWAFFAR: so, I don't want my other sunsetting Board Members to feel left out, could you please explain each of those?

MS. WYARD: Well, Tom there, crawling across the desert, organic water, organic water.

I just recall, I think it was April of 2016, Tom had 80 slides on revisions to the policy and procedures manual. So, I looked at that and I think Tom would have been saying, organic beer, organic beer. But that's -- I just, that effort was amazing and I thought of you there.

And then, this last one, again, maybe this is obvious to some, but we've got Lisa and Harriet sitting there and Lisa looks over to Harriet and she says, do you ever think about just chucking all of this and just retreating to a life of mindless consumerism? I think that would never happen with you two, because of your dedication, so, some sarcasm there.

NEAL R. GROSS

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

CHAIR BEHAR: Well, with the advent of Amazon, I have a little bit more opportunity to be a consumer, but most of the time, at the end of the dead-end road, not much comes my way.

DR. BRADMAN: So, I have a question, just about your comments about celery powder and if any of the group members of OTA have commented about concerns about health issues related to nitrates and nitrosamines, and what their dependence is on this product and are there alternatives, not just in terms of other vegetable juices that have nitrates, but are there other products besides salt, for example, that might help address processed meats?

MS. WYARD: So, I'll start with the research part of it, and I think you heard quite a bit on the research from the panel and April and the Organic Center gave their comments on the webinar. But certainly, what we are looking at is a number of different vegetables that could be used, so not just celery, but I think Swiss chard at this point is probably the most promising.

NEAL R. GROSS

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

But again, it is the nitrate that we're after. So, despite what vegetable we're looking at, it is the nitrate that we're looking at, that gets converted to nitrite. But we are looking at levels, in terms of how it's grown. We certainly don't want to just revert to input substitution.

Our goal is -- I mean, if we wanted to create celery powder, organic celery powder that had the levels that were needed, we could increase the amount of fertilizer, we could just go with a straight input substitution.

But we really want to look at how this could be compatible with organic principles, how we can look at ways to not need as much of the nitrite. And that's also -- I mean, there's really -- I think there's already quite a bit of data out there that shows that less nitrate is used with celery powder.

And then, there's also a number of different combinations, vitamin C, ascorbic acid, tocopherols, that reduces the development of nitrosamines. So, we are absolutely committed to

NEAL R. GROSS

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

making this, not only as compatible with organic production as possible, but also organic handling.

So, a number of different factors that we'll be looking at there.

The health concerns are, I mean, they're important to, I hope, everybody. We've been aware of the concerns with red meat and processed meat for many, many, many years. We're not going to -- I'm not going to stand up here and defend processed meat or red meat or nitrates or nitrites. At the end of the day -- I'm not trying to pull the wool over anybody's eyes.

At the end of the day, we're dealing with nitrites. And the World Health Organization, in 2015, categorized red processed meat -- or, processed meat as a category one carcinogen, that is true. I think that this is a matter of food education and we all need to be educated on our choices. I am not going to eat, and I hope that, if we are all educated, we are not going to be eating a hot dog a day or seven pieces of bacon a day, which is what it would take, according to the

NEAL R. GROSS

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

research, to increase your risk of cancer by one percent over a lifetime.

This is a food choice issue. We, as a National Organic Standards Board, as an organic community, do we decide what consumers can have access to, in terms of is it organic or not? Are we going to take these products away saying, you shouldn't eat these products? Or do we educate on healthy choices and provide everybody with a choice of organic or not organic?

I think what we hear from our members is that it's important to them to be able to create the best source and process as possible, so that if a person chooses to eat organic bacon, to eat organic hot dogs, they do that as an educated shopper and they have the opportunity to support the organic livestock sector, they have the opportunity to have organic celery powder or Swiss chard, instead of the natural forms.

I agree, I think that there's work to be done on the labeling, that's not an organic issue, it's an FSIS issue. The requirement to say

NEAL R. GROSS

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

uncured if you're using celery powder, I think that our member companies have concerns about that too.

I think that there's been efforts to get that changed, so that a consumer isn't looking at uncured, no added nitrates or nitrites. More information to help consumer choice is definitely what we're in support of. Did I answer all your questions?

DR. BRADMAN: Yes, thank you.

CHAIR BEHAR: Emily, go ahead.

MS. OAKLEY: Yes, I think you just brought up an interesting point. I mean, it is about food choices and it isn't our job to tell people what to eat, but it is our job to review materials that are synthetic, that then are allowed for use in organic and for organic labeling.

So, I think that is the difficulty that we're struggling with when we review these materials. It's not that we are, I think, necessarily trying to take away consumers' choices, but we're also trying to do due diligence to the synthetics that we do allow, and do they represent

NEAL R. GROSS

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

what organic consumers expect from the label?

MS. WYARD: Yes, I think, this is a point that Tom was trying to make earlier too, celery powder is not carcinogenic. Red processed meat -- or, processed meat, that's what's categorized as carcinogenic. So, yeast is to celery powder as processed meat is to alcohol. Alcohol is the concern, processed meat is the concern.

In terms of the purview of the Board and reviewing these materials and evaluating them to the OFPA criteria, nitrates, in and of themselves, are not necessarily the issue. Once they are put into the meat and you put heat on there and they create the nitrosamines, it's the nitrosamines that are actually the carcinogenic compound that we're interested in and we're concerned about.

CHAIR BEHAR: Tom? Ashley, do you have your hand up? She's a halfway, maybe. Okay, Tom, next.

MR. CHAPMAN: I actually had a dairy

NEAL R. GROSS

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

culture question, but I just want to make a clarification, though, that celery powder is a 606 item, it is a agricultural input, not a synthetic input. Just making sure we make that clear. Unlike yeast --

MS. WYARD: Thank you.

MR. CHAPMAN: -- which is on the -- it's on the non-synthetic list.

MS. WYARD: Right, that's a good point, but I think it's just, it's something that we have to acknowledge.

MR. CHAPMAN: Yes. Onto the dairy cultures, though. I liked your slide, it had slightly different pictures than in your comments. But as I was looking at -- you made a couple points on the dairy cultures item, I'm just focusing on the one about the labeling. And I noticed dairy cultures wasn't on any of those labels, can you speak a little bit to that?

I mean, if I was a consumer, I see a list of culture strains that span half the ingredient panel, that is not the actual item.

NEAL R. GROSS

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

So, it seems like that -- I keep hearing that complaint, that complaint came up from Dairy Foods Association, I'm just trying to -- I'm having a hard time understanding it, so can you help me understand it a bit more?

MS. WYARD: Sure. Well, in these examples up here, live yogurt cultures, live cultures, these are all dairy products. So, I guess, if you're a consumer and you're holding a dairy product and it says live cultures, those are cultures for dairy products and it's much more clear than if it said microorganisms.

I think that just having its own place on the National List, it's a lot easier. I mean, I think probably there's a -- you're not going to find hundreds of consumers going up and down the store aisle with the National List in one hand and a dairy culture in the other, right?

MR. CHAPMAN: Yes.

MS. WYARD: But we have heard from our member companies that their customers, there's actually a growing number of consumers, shoppers,

NEAL R. GROSS

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

that are reading ingredient statements and they're looking at the National List and it's easier to cross-reference that. So, maintaining a separate listing, where we can manage that group, that subset of microorganisms, is a lot easier.

And I think, really the point is just the precedent that it sets, that this is fine, make it a separate recommendation. We think this is analogous to annotations, creating annotations during the sunset review process, which is not allowed. We don't think it's a very clean process, a separate recommendation should be there.

I would love to support food label transparency and literacy, though, and get people up and down the aisle reading food labels and looking at the National List and being able to cross-reference, that would be awesome.

CHAIR BEHAR: Ashley?

MS. SWAFFAR: Yes. So, I don't sit in a Handling seat, so I feel like I'm a little of the average consumer here and nowhere does that say dairy cultures.

NEAL R. GROSS

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

And if I had the National List in front of me that said dairy cultures, it says live cultures, live yogurt cultures, cultured milk. Would there be any product that would go away if we delisted dairy cultures, or would any product label have to change?

MS. WYARD: With the listing of microorganisms, as a broad category listing, that should cover dairy cultures. I would hope that all of the information gets transferred over to that listing and that the whole history of dairy cultures and everything could be found under the listing of microorganisms.

So, it wouldn't impact dairy cultures the way that you're suggesting or asking about with your first question. And then, no, it wouldn't change ingredient statements.

CHAIR BEHAR: I guess the only thing I would say is that, when a dairy processor is buying a culture, it says culture on the name. So, during certification or whatever, I mean, eventually, it's understood that it's a microorganism, but it's the

NEAL R. GROSS

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

kind of nomenclature that's used out there.

MS. WYARD: It's the basic food industry nomenclature. Anybody that is in the food processing, food science world knows that. And from an R&D perspective, anybody that's working in a company that's making these products, they're going to recognize dairy cultures. It's very clear, it's right there. They would see microorganisms and might have to go ask some people, does that include dairy cultures? It's just really clear, so I don't see what the big deal is to just, don't break it, leave it, don't touch it.

If you're doing it to eliminate work for NOSB, I don't think there's that much work involved. We ought to be thinking about shoppers, we need to be thinking about the people out there making products. Just leave it alone.

CHAIR BEHAR: Steve?

VICE CHAIR ELA: Yes. I mean, I'm the lead on that. And I get that, but it makes no sense to me to have the -- the writeup is exactly the same for both things. So, I guess it's not a lot

NEAL R. GROSS

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

more work, because you just copy one to the other.

On the other hand, it makes no sense for me to have two things that are the same on the list. That is confusing to me.

And as far as the process goes, I guess I hear, yes, we could ask for a work agenda item, we could then go through the process and spend two years going down that road, but if it is a redundant listing, it's a redundant listing.

It's not like we're annotating differently, we're not -- I mean, like I say, the listings are the same, except one's dairy culture and one's microorganisms. So, I hear the process-oriented comments, but I am having a hard time wrapping my head around, we're not really changing anything.

MS. WYARD: Yes, I think a separate recommendation is just a cleaner approach and we just wanted to bring up the potential precedent this could set.

And just in terms of keeping a really tight ship, how difficult is it to make a separate

NEAL R. GROSS

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

recommendation to get the same job done, rather than bringing it under sunset, which is a different kind of evaluation? The evaluation is whether or not these substances on the National List should be renewed according to OFPA criteria? It's just not a clean fit. So, just recommending a different process, rather than the sunset process.

CHAIR BEHAR: Sue?

MS. BAIRD: Gwen, I apologize for my ignorance, but would there be any other product that a dairy culture would be used in a nondairy final product, as microorganisms might be? I'm thinking about lactose intolerant people. If it was just labeled microorganisms, would a dairy culture be used in another product? Does that make sense, the question I'm asking?

MS. WYARD: No.

MS. BAIRD: No?

(Laughter.)

MS. BAIRD: Okay. So, the answer is no? Or the answer, it doesn't make sense?

MS. WYARD: The question is, would a

NEAL R. GROSS

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

dairy culture be used in a nondairy culture product?

MS. BAIRD: Correct.

MS. WYARD: Yes, there are microorganisms that are used for dairy cultures that are also used in other products, they wouldn't be labeled a dairy culture, they would probably just be labeled as --

MS. BAIRD: Microorganisms.

MS. WYARD: -- live cultures.

MS. BAIRD: So, would there be a possibility then, if it were labeled as microorganism and used in a nondairy product, that somebody might have a potential allergen to it?

MS. WYARD: They would have to declare that otherwise, I think --

MS. BAIRD: They would have to declare it otherwise, okay, thank you.

MS. WYARD: -- in terms of the allergen labeling requirements.

CHAIR BEHAR: Okay. We are now 25 minutes over. I know Ashley has got one more, but we still are going to get a little wrap-up from

NEAL R. GROSS

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

Jenny at the end.

MS. WYARD: I'm sure the ladies and the gentleman -- everybody in the gallery had no idea that dairy cultures would be between them and a cocktail.

(Laughter.)

CHAIR BEHAR: All right. Ashley, and you'll be the last one.

MS. SWAFFAR: So, I hear what you're saying about, it's not a clean process to do this at sunset. But when we ask to put things on our work agenda, it's normally for annotation purposes, and I think that would actually set a worse precedent to have something put on our work agenda to remove it.

MS. WYARD: Fair enough. I think just document everything really well. I think one of our concerns is just that the history of dairy cultures and all the decision making could get lost in the shuffle. So, I think if all of the information is easily found and shoppers and everybody out there are going to have to contend

NEAL R. GROSS

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

with one broad category listing of microorganisms.

But I stand by our comments, we think that it's preferable to have a separate listing.

It allows for us to manage annotations separately, should there be one. They're really their own unique category of cultures and we believe they have earned and should continue to have their own listing.

CHAIR BEHAR: Well, as the person who put it on the list, many years ago, I voted to move it -- to take it off. That was when I worked at Organic Valley. Okay.

MS. WYARD: Thank you, everyone.

CHAIR BEHAR: I think we are done with public comment, but before Jenny speaks, I just want to say, tomorrow morning, we will start at 8:30 and Bill Wolf, with Colleen O'Brien on deck. So, just ready for tomorrow, but now to Jenny.

DR. TUCKER: Just a couple of closing comments. First, let us all give a round of applause to our public commenters today, particular the farmers who came so far.

NEAL R. GROSS

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

(Applause.)

DR. TUCKER: This public comment process is such a vital part of the participation and we value every single one of you, so thank you all for coming.

I was asked a couple of times if the presentation, NOP update presentation, would be posted. It is already up, so the web team was very efficient. If you go to the meeting page, you'll be able to download the presentation from this morning.

I wanted to acknowledge the comments on strengthening organic enforcement comment period, that 60 days may not be quite enough time, given the scope of the rule. We listen for the themes that come out of the meeting, that is one that was very, very clear.

So, the rule hasn't been released yet, so it may be, just given the number of people who have expressed interest in that, we might be able to start with a longer people, rather than making folks request that extension. So, that's an item

NEAL R. GROSS

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

we will take back.

There were a couple of comments on the origin of livestock public comment period and moving to a final rule. And again, for folks who aren't around rulemaking a lot, I did want to just mention or reiterate that a final rule is always grounded in the proposed rule.

And so, the proposed rule for 2015 that has been reopened for public comment, that is the foundation, that is the basis for any final rule that would be issued. We are just seeking sort of a final round of comments, but that's how rulemaking works. And so, even though there's some time between them, but the process remains the same, that the proposed rule is the foundation for the final rule.

So, my final comment is around imports.

I appreciate the number of comments emphasizing the importance of that. I think the proposed rule that will come out will have a lot to say on that.

I did want to clarify, this morning, I was focusing on what we're doing in-country on

NEAL R. GROSS

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

yield analysis as a direct path to enforcement. I did want to emphasize, we do look at ships when they come.

When a ship is coming and there is reason to wonder about it, we do have a strong relationship with Customs and Border Protection.

We are now able to access ACE reports. And so, I think we are looking at a tighter and a deeper level. Ships, it's just not always the front door to enforcement, because every time we've done that it has led back to certified farms, every single time.

And so -- but I didn't want folks to be under the impression that we weren't even checking, we are checking and certifiers are doing testing. We are confirming that traceability. So, just a quick comment on that import work.

Again, thank you so much for the thoughtfulness of all the comments today, we genuinely appreciate hearing from all of you, and have a good evening.

CHAIR BEHAR: I have one question,

NEAL R. GROSS

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

Jenny. Would you like to speak a little bit about energy infrastructure? We did have a few comments on that.

DR. TUCKER: Yes. So, there were -- thank you. There were a couple of comments on the energy infrastructure. The Board had asked for a work agenda item on that. And at the moment, we are not going to move forward with that work agenda item. There are too many other, right now, high priority items on the agenda.

And there are a lot of local, community-based solutions and existing organizations that can support that work. That it really starts stretching the limits of our authority in that area. And so, we heard from folks who have experienced challenges on the ground with these.

We would encourage other organizations across the organic community to bring those voices together, to join to create those best practices that can help farmers that are facing those issues on the farm.

NEAL R. GROSS

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

There are many areas where the community can best support itself in helping farmers face those on-the-ground challenges. So, for right now, we will not be moving forward with that work agenda item.

CHAIR BEHAR: Okay. Everyone, thank you for a long day, but a good day, and see you bright and early tomorrow at 8:30 a.m.

(Whereupon, the above-entitled matter went off the record at 6:03 p.m.)

NEAL R. GROSS

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

UNITED STATES DEPARTMENT OF AGRICULTURE

+ + + + +

NATIONAL ORGANIC STANDARDS BOARD

+ + + + +

FALL 2019 MEETING

+ + + + +

THURSDAY
OCTOBER 24, 2019

+ + + + +

The Board met in the Philadelphia Ballroom at the Doubletree Hotel & Suites Pittsburgh City Center, One Bigelow Square, Pittsburgh, Pennsylvania at 8:30 a.m., Harriet Behar, Chair, presiding.

PRESENT

- HARRIET BEHAR, Chair
- STEVE ELA, Vice Chair
- SCOTT RICE, Secretary
- SUE BAIRD
- ASA BRADMAN
- JESSE BUIE
- TOM CHAPMAN
- LISA de LIMA
- RICK GREENWOOD
- DAVE MORTENSEN
- EMILY OAKLEY
- DAN SEITZ
- ASHLEY SWAFFAR

NEAL R. GROSS

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

STAFF PRESENT

MICHELLE ARSENAULT, NOSB Advisory Board
 Specialist, National Organic Program
 PAUL LEWIS, Ph.D., Director, Standards Division,
 National Organic Program
 DEVON PATTILLO, Materials Specialist,
 National Organic Program
 JENNIFER TUCKER, Ph.D., Deputy Administrator,
 National Organic Program

PUBLIC COMMENTERS

JULIA BARTON, Ohio Ecological Food and Farm
 Association
 ALECIA BOCK, AgriSystems International
 MARY CAPEHART, Organic Valley
 DAVE CARTER, Crystal Springs Consulting Inc.
 ELI CHANDLER, Thorvin Inc.
 MEAGAN COLLINS, Accredited Certifiers
 Association
 LYNN COODY, Organic Produce Wholesalers
 Coalition
 DAIN CRAVER, Bossig
 MIKE CROSTER, CROPP Cooperative
 ELIJAH DEAN, Ohio Ecological Food and Farm
 Association
 JEFFERSON DEAN, Ohio Ecological Food and Farm
 Association
 MIKE DILL, Organically Grown Company
 JAY FELDMAN, Beyond Pesticides
 DAVID FERMAN, Brighthouse Organics
 LEE FRANKEL, Coalition for Sustainable Organics
 CHRIS GRIGSBY, MOFGA Certification Services
 ROBIN HADLOCK SEELEY, Ph.D.,
 University of New Hampshire
 MICHAEL HANSEN, Consumer Reports
 JOHN HENDRICKSON, Small Farm Works
 DAVID HILTZ, Acadian Seaplants Ltd.
 TINA JENSEN AUGUSTINE, Organic Materials Review
 Institute
 GARTH KAHL, Independent Organic Services Inc.
 PAT KERRIGAN, Organic Consumers Association
 AMALIE LIPSTREU, Ohio Ecological Food and Farm
 Association

NEAL R. GROSS

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

SANDY MAYS, Wolf DiMatteo + Associates
PEGGY MIARS, Organic Materials Review Institute
DAVID MOORE, Neudorff
BLAYNE MOZISEK, D.V.M., Merck Animal Health
EMILY MUSGRAVE, Driscoll's Inc.
COLLEEN O'BRIEN, Oregon Tilth Certified Organic
TASHA OLSON, Fiberstar Inc.
MARISOL OVIEDO, Northwest Horticultural Council
BJARNE PEDERSEN, Ellepot A/S
ERNIE PETERSON, Cashton Farm Supply
HARRY RICE, Global Organization for EPA and DHA
Omega-3s
BETH ROTA, Quality Certification Services
MARGARET SCOLES, International Organic
Inspectors Association
BRIAN SHEVRIN, Vermont Organic Farmers
JILL SMITH, Western Organic Dairy Producers
Alliance
MICHELLE SMOLARSKI, International Food Additives
Council
DAVID SUCHOFF, North Carolina State University
LESLIE TOUZEAU, Quality Certification Services
STEVE WALKER, MOSA
DAVID WILL, Chino Valley Ranchers;
Methionine Task Force
DIANE WILSON, Nature's One
BILL WOLF, Wolf DiMatteo + Associates;
Thorvin Inc.

NEAL R. GROSS

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

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

Public Comments, (Cont'd)	5
Handling Subcommittee	
Topics:	
2021 sunset substances review:	
Acids, Citric	340
Acids, Lactic	346
Calcium chloride	348
Dairy cultures	350
Enzymes	367
L-Malic acid	370
Magnesium sulfates	374
Microorganisms	377
Perlite	385
Potassium iodide	387
Yeast	389
Activated charcoal	394
Alginic Acid	397
Ascorbic acid	408
Calcium citrate	411
Ferrous sulfate	414
Hydrogen peroxide	417
Nutrient vitamins and minerals	419
Peracetic acid	424
Potassium citrate	429
Potassium phosphate	431
Sodium acid pyrophosphate	437
Sodium citrate	443
Tocopherols	446
Celery powder	451
Fish oil	485
Gelatin	493
Orange pulp, dried	498
Seaweed, Pacific kombu	513
Seaweed, Wakame (Undaria pinnatifida)	516
Adjourn	527

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

8:31 a.m.

CHAIR BEHAR: Welcome to the second day of the 56th National Organic Standards Board in-person meeting. And the meetings go on and on. Okay, so we are continuing today with public comment, and then in the afternoon we will start our subcommittee meetings with the Handling Subcommittee.

So starting first, I see him already on deck, and of course I think there's butterflies out there still for everyone. And anyone can come up even during break or whatever and get their butterfly.

Bill Wolf is first with Colleen O'Brien and then Beth Rota on deck after that. Welcome, Bill.

MR. WOLF: Good morning. I'm Bill Wolf with both Wolf DiMatteo and Associates, a leading organic consultancy, and Thorvin Kelp. My seaweed company, Thorvin, only uses and produces certified organic marine algae and would benefit

NEAL R. GROSS

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

from your proposal to require certification of all marine algae used in organic crop production.

However, we do not support this approach. Adding individual annotations to the National List or requiring that input sources be certified is not a sustainable path, or in the best interests of the organic community.

So first of all, I really want to thank you for delving so deeply into the sustainability of harvesting marine materials. I'll amplify on the written comments and articles that we submitted.

I have been pursuing the sustainable harvest of seaweeds, encouraging farming practices that earthworms love, and increasing organic acreage worldwide for 48 years. Observing what earthworms like is a powerful tool for choosing inputs. These earthworms are actually from my organic farm. And they love kelp meal. And they run away from sodium nitrate.

So what does that mean? How do we address that? For over four decades I've used and

NEAL R. GROSS

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

recommended seaweeds and liquid foliar extracts, soluble powders, and liquids, and seen a change in crops. It's extremely efficient, requiring only a few ounces per acre to improve yield and quality.

So, more important, seaweed is a renewable resource and unlike many other farming inputs. Now that you have done this deep dive on marine materials, I ask that you take a more strategic approach to studying inputs.

Why not take a step back and prioritize which inputs most need to be reviewed for their life cycle impacts? Examples include non-renewables like rock phosphate, and diesel fuel, and byproducts that encourage pesticide use like GMO cotton seed meal.

So finally, we agree that seaweed harvests must ---

CHAIR BEHAR: Sue?

MS. BAIRD: What do you have in your bucket?

(Laughter.)

NEAL R. GROSS

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

MR. WOLF: This is actually some earthworms from my earthworm farm, from my organic farm. And they're not real happy right now. This bucket's pretty happy. This bucket, I spread a little sodium nitrate on the left side, they ran over to the right side, so I put a little kelp in there. So they're a good measurement of what's going on.

MS. BAIRD: Can I have follow-up?

CHAIR BEHAR: Go ahead.

MS. BAIRD: Yes. So can you explain to me how kelp meal helps the soil and earthworms?

MR. WOLF: Well, kelp meal is a little different than the liquid seaweed that you're actually discussing on the National List, on 601.

Kelp meal is a great mineralizer, and improves soil health and fertility, and is almost like a worm food and trigger for all kinds of biological activity.

For decades, I've had people call it the fairy dust of farming where, literally, a few ounces, one pound per 100 square feet has a huge

NEAL R. GROSS

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

impact. So you're not talking about huge volumes of material.

So when you get into harvesting marine materials and looking at basically collecting the nutrients that are in the brine of the ocean, you know, it's an incredible nutrient brine of every element on the earth's crust, collecting them and bringing them back from having been washed out of depleted soils, you're re-mineralizing.

And you're creating really healthy nutrient-dense crops which was one of the primary goals of organic production. So, I mean, when I grow crops like my dill and parsley, you can smell it from a couple feet away.

MS. BAIRD: What's the different action in the liquid and the meal?

MR. WOLF: Well, the meal is really a conditioner, a total overall of 60 minerals mineralizing the soil. The extract is a biostimulant. And it's primarily applied foliar, or in a drip system, or in irrigation. And there are about literally hundreds of products that are

NEAL R. GROSS

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

using this type of material in blends with fish and seaweed, or just straight seaweed formulations.

And this is an extract that, literally, that's enough to spray over an acre. This is enough powder to spray about, almost two acres. So you're not, that's one of the interesting things about the whole conversation about marine materials where you've been drilling down to tonnage, and impacts, and what not. The organic farming segment of usage of marine materials is quite small.

And when we're talking about, like, the tap, the tap that talked about the tonnage, or the information that was presented yesterday about tonnage, those were total tonnages. And none of the cultivated seaweed is going into agriculture, to my knowledge.

So you drill down, and you start talking about, let's say, some of the figures you heard were 20,000 wet tons of seaweed out of a biomass of perhaps even a million wet tons of what's growing and 400,000 wet tons that's being broken away every year. Of that 20,000 wet tons of harvest, probably

NEAL R. GROSS

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

less than 3,000 wet tons is coming into organic agriculture.

CHAIR BEHAR: Emily?

MS. OAKLEY: Thank you for your comments. And that actually pertains to what I was going to discuss which is it's very difficult to find data on harvested yields used in crop fertility inputs on a global scale. Even the FAO has a hard time coming up with sound or even remotely close figures.

But I just want to reiterate, as I said yesterday, that the work on this material is not to remove the use of seaweeds for farmers. But as you said, farmers do rely on them on a very wide level.

So it is, I think, as you looked at the triage of activities that the NOSB can look at, it is an important issue for us to explore, simply because it is such a widely used material. So we do have a responsibility to do our due diligence on something that is so essential for growers.

MR. WOLF: Will you also consider

NEAL R. GROSS

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

looking at different options for addressing all inputs? Is that ---

MS. OAKLEY: You mean, like, your suggestion that we do the, apply commercial availability across all categories? Is that what you mean?

MR. WOLF: Yes. Taking a look at basically prioritizing all the different kinds of things that our organic farming does.

My goal in life is to encourage more acreage. So I don't want to create a situation, I don't want to encourage you to create more regulation that restricts organic farming input so that we have less acreage conversion.

I mean, the fact is that most of the fraud that happened with grain happened because we didn't produce enough organic grain here which is a much longer story of why. But that led to the problems we have now.

And we do restrict organic farming more than I think we need to. So if you start looking at all inputs, I think you need to look at it from

NEAL R. GROSS

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

all the criteria on the National List which includes encouraging organic farming and encouraging earthworms.

And my only objection was that seaweed is probably the least impactful compared to mined minerals and sodium nitrate.

MS. OAKLEY: I think, I mean, I think this is, I don't want to take too much of our time, but I think, you know, what we determine as most impactful would vary greatly just by everyone in this room. And it's a difficult thing to determine. But I think just because we've explored one area doesn't mean that we shouldn't also explore others. I think we should do our due diligence.

But as an organic farmer, I mean, I make my full time living from growing organic vegetables and fruits. It's certainly not my interest whatsoever to reduce the number of organic farmers in the US. And so I don't see this work as relating to that in any way.

MR. WOLF: Well, yes, I mean, if you said oh, we're going to prohibit diesel fuel, and

NEAL R. GROSS

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

we all had to farm with horses, that would be very cool, but it ain't going to happen. And it wouldn't be good for acreage. Thank you.

CHAIR BEHAR: Thank you, Bill. Next up, Coleen O'Brien and Beth Rota on deck.

MS. O'BRIEN: Good morning. My name is Colleen O'Brien. I'm Oregon Tilth's Farm and Livestock Technical Specialist. Oregon Tilth provided written comments addressing many of the topics on the agenda for this meeting. And we thank the NOSB for their work to continuously improve the National Organic Program and respond to changes in the organic industry.

A recent evolution in the organic industry has prompted the comments I'm going to share with you today. In the wake of the 2018 Farm Bill legalizing hemp cultivation at the federal level, Oregon Tilth has seen a marked increase in applications from hemp growers nationwide. We are excited to see strong interest in organic certification at the onset of the US's commercial hemp industry.

NEAL R. GROSS

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

Our work with these operations has brought about its own unique challenges, particularly when it comes to the plants and planting stock used in hemp production.

Due to the reproductive nature of the crop, hemp is commonly propagated through cloning in which a piece of the parent plant is taken, rooted out, and grown into a start. Tissue culture can also be used to produce planting stock for hemp.

Hemp starts are typically produced at uncertified operations which may use prohibited substances such as rooting hormones. An organic producer purchases the starts as non-organic planting stock after a commercial availability search fails to find any organic hemp starts.

How certifiers should evaluate these non-organically produced clones and tissue cultured hemp starts has been the subject of debate amongst ACAs. The organic regulations state that an organic operation may use non-organic planting stock after a failed commercial availability search and only when the planting stock is untreated or

NEAL R. GROSS

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

treated with materials allowed per the National List.

NOP guidance 5029 states that substances used by a planting stock purveyor prior to the harvest of their non-organic planting stock for sale and use in organic production are not considered treatment.

What is unclear is when substances such as rooting hormones or tissue culture media used by uncertified operators to produce that non-organic planting stock are subject for review by certifiers for compliance.

The use of harvest as a differentiating activity breaks down when considering planting stock produced by these kinds of propagation methods. This has led to an inconsistent approach between certifiers when reviewing and approving the use of non-organic planting stock for hemp production.

We appreciate the NOSB's recent work on strengthening the organic seed guidance and recommendations to revise NOP 5029 to address

NEAL R. GROSS

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

ongoing concerns around organic seed sourcing. However, the NOP's guidance still falls short when it comes to assessing the compliance of non-organic planting stock and achieving a consistent approach among certifiers.

We request that the NOSB make additional recommendations to clarify when treatments and inputs used on non-organic planting stock should be reviewed by certifiers. This would also provide an opportunity to consider additional areas where the NOP guidance can be further strengthened to encourage the use and production of organic planting stock. Thank you.

CHAIR BEHAR: I have a question.

MS. O'BRIEN: Sure.

CHAIR BEHAR: How come you don't consider the hemp plant an annual seedling versus planting stock? Because looking at the definition of annual seedling, it's a crop that ---

MS. O'BRIEN: Is started from seed. And that's the problem here. These are not started from seed. They're started from a plant tissue.

NEAL R. GROSS

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

And so unfortunately, we cannot classify them as an annual seedling. We'd like to.

CHAIR BEHAR: Steve?

VICE CHAIR ELA: So just run me through that again. Okay, I know the process. So it really is whether those rooting hormones and the tissue culture media are prohibited substances or not. I mean, I'm just trying to get it cemented in my head exactly what the tension is.

MS. O'BRIEN: Right. At what point do we need to start looking at inputs used on non-organic planting stock? Is it the moment the planting stock is purchased and used by the organic operation, or should we be looking farther back?

You know, with seeds it's a little more clear. We've gotten much clearer guidance on how to look at non-organic seed and seed treatments but not so much with planting stock.

VICE CHAIR ELA: So just to follow-up, I mean, like, putting it in perspective. It'd be a perennial like an apple tree but kind of the same deal. I mean, most of those root stocks are clonal,

NEAL R. GROSS

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

you know, produced in stool beds in non-organic situations most of the time. You do it every year, and that's good.

MS. O'BRIEN: Yes. The hemp is grown as an annual, even though it, you know, it could be a perennial.

VICE CHAIR ELA: I mean, good question. Thank you.

CHAIR BEHAR: Scott?

MR. RICE: Thanks Colleen. You mentioned improving the guidance. Do you see NOSB as instrumental in that? Or is that something that could come directly from NOP, sort of potentially quicker in some cases?

MS. O'BRIEN: Yes. I mean, it could be quicker. But I think editing that guidance, 5029, would be a good step to make it a lot more clear. Because it is focused pretty heavily on looking at seeds and seed treatments. So if you could add more focus to planting stock that would be really helpful.

MR. RICE: Thanks.

NEAL R. GROSS

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

CHAIR BEHAR: I'm wondering too, at some point when the most recent Farm Bill moves through regulatory approval of hemp as a federally approved crop, it might be worthwhile for the NOP, NOSB to do some kind of task force to understand all the various issues with hemp.

Because we've had a few hemp questions, and we understand that there's unique aspects to the propagation and preparation of this crop for market.

So that might be something to put on the agenda for the future once we have more clarity for the federal program, the National Organic Program, how it would deal with it. Right now, we're kind of in limbo land until we get that final approval at the federal level.

MS. O'BRIEN: Okay.

CHAIR BEHAR: Steve?

VICE CHAIR ELA: So strawberries would be a great, I mean, that's an annual, starting to be produced clonally, not always enough organic strawberry starts available from my understanding.

NEAL R. GROSS

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

So wouldn't that be the same situation? And how do certifiers handle that?

MS. O'BRIEN: It varies, it definitely varies. And that's the problem, that we are inconsistent at the moment.

CHAIR BEHAR: I seem to remember that we did kind of work on this in the strengthening organic seed guidance. We talked about some planting stock issues. But I'm a little fuzzy right now to be able to quote that to you. But we could look back. Yes, I think there was some addressing of planting stock in that. So I'd have to look back and see what I wrote. Thank you.

Okay, next up is Beth Rota with Dave Carter and then Blayne Mozisek after that. Thank you, Beth.

MS. ROTA: Thanks, good morning. And thanks to all the members of the NOSB. Your work is really important to ensure that the organic label will continue to have meaning and value for organic producers and consumers.

My name is Beth Rota. I'm the Policy

and QA Manager for Quality Certification Services, and I appreciate this opportunity to share the perspective of my agency as we work towards the same goals.

QCS currently certifies over 1,200 operations to the USDA NOP, US and worldwide. In preparation for these comments, we reached out to our producers for feedback. And when I called our certified poultry operations about fenbendazole, they just wanted to talk about vaccines.

So that's what I'm going to talk about mostly this morning. Now, vaccines are critical to organic livestock producers to prevent illness.

And at first glance, the commercial availability clause for non-GMO vaccines seems like an easy fix to the vaccine question.

We support this over the other options presented in the proposal but think there is more work to be done to make it feasible. Commercial availability is a complex approach, even for organic seeds. But there's no certified label claim or registration process to easily determine

NEAL R. GROSS

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

which vaccines are produced without excluded methods.

Many organic producers lack the technical expertise to evaluate that a vaccine is GMO, or what is equivalent, and will heavily rely on their certifiers to make that determination. We need to confront the technical realities of commercial availability for vaccines together and not leave that burden to certifiers alone.

Vaccine production methods are often not transparent and are guarded by manufacturers.

Couple that with rapidly changing technology and inconsistent terminology across agencies such as the FDA, APHIS, and NOP, the resources provided in the discussion document are a helpful starting point, but they're not comprehensive.

And we're in favor of the creation of a publicly available and up to date list of non-GMO vaccines, but it's unclear who should be responsible for maintaining the list and financing its upkeep.

We also need to address the question

NEAL R. GROSS

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

of vaccine equivalency to ensure that producers lacking technical expertise are not unfairly disadvantaged. And we think it's reasonable to allow documentation of commercial availability to come from veterinarians.

Concerning paper, we support the proposed listing at 205.601(o) as virgin or recycled paper without colored or glossy inks. This comprehensive listing includes paper for all crop production aid purposes including paper pots, seed tapes, collars, hot tape.

And we recognize that some paper production aids, such as paper tape pots, may contain ingredients that are not typically part of paper, as detailed in the technical evaluation report. But we believe this annotation would effectively prohibit the additional synthetic ingredients.

We are not in favor of a maximum synthetic polymer content or minimum bio-based contents, how they exceed existing requirements.

But some parameters for biodegradability may be

NEAL R. GROSS

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

appropriate. But maybe we could work out those kinks later after getting it on the National List.

CHAIR BEHAR: Steve?

VICE CHAIR ELA: Okay, same question as yesterday.

MS. ROTA: Okay.

VICE CHAIR ELA: So given, okay, we don't want to have biodegradable mulch issue where we have an impossible situation.

MS. ROTA: Yes.

VICE CHAIR ELA: I think the committee understands that. We don't want that either.

MS. ROTA: Right.

VICE CHAIR ELA: Conversely, we don't want to leave the door wide open to, since the paper pots are manufacturing paper for the pot --

MS. ROTA: Right.

VICE CHAIR ELA: -- unlike newspaper that's recycled, I don't think we want to leave open the door for, you know, anything goes.

MS. ROTA: Right.

VICE CHAIR ELA: So let's say we, you

NEAL R. GROSS

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

know, current standard is that we allow some synthetic in the pot to give it integrity. How do we limit that from being, you know, 100 percent synthetic or, you know, with non-cellulose fibers.

MS. ROTA: Well, I mean, paper is a synthetic material, and so we're not looking at other materials on the National List as to what percentage of them are synthetic. It is a synthetic material, and we've addressed that, and the concerns with that, and still determined that it meets OFPA criteria.

So I'm not sure that setting a percentage of synthetic material is really feasible or, like, it's just going to create a big paperwork burden for enforcement of that as well.

VICE CHAIR ELA: So if I were a manufacturer, and wanted to put plastic fibers, non-cellulose based, let's say 50 percent in the pot, and they could be long, thin strands that would not show up easily in the soil, would look like they biodegrade --

MS. ROTA: I see.

NEAL R. GROSS

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

VICE CHAIR ELA: VICE CHAIR ELA: --
you know, we would be allowing microplastics in
soil. And they would disappear, but they wouldn't
degrade. But, you know, with the listing you
propose, that would be allowed.

MS. ROTA: Well, I think with, and I'm
not a technical expert on paper production, but
we're talking about ingredients that are part of
paper, not ingredients that are separate from
paper, not additional plastics that aren't part
of paper.

VICE CHAIR ELA: But the annotation you
propose could allow that. Because we're allowing
virgin materials to be used to make the pots.
So I think the committee's wrestling with how do
we keep the genie in the bottle but still have a
genie with the bottle.

MS. ROTA: Right. I don't know,
honestly.

(Laughter.)

MS. ROTA: I wish I did. And that may
be a question for, you know, the paper pot

NEAL R. GROSS

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

manufacturers and to look at what the content is of the products on the market right now, and that are used by producers.

CHAIR BEHAR: Emily?

MS. OAKLEY: I just want to throw out there that you can buy synthetic paper on Amazon and recycle it.

CHAIR BEHAR: So that's really our conundrum, is non-cellulose based fibers in the paper pots. And there are what's called paper pots that are 100 percent synthetic fibers, mostly for the nursery industry, so they don't degrade for two, three years. And so we really would not like to see those used, especially with annual crops.
Emily?

MS. OAKLEY: Well, I'm just on Amazon right now. So Xerox has Revolution Premium Never Tear is an exceptional synthetic paper for unmatched durability. I won't read anymore, but just putting it out there that there are synthetic papers that are purely synthetic that are in the stream of production right now and could be recycled

NEAL R. GROSS

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

and already used in our current listings.

MS. ROTA: Could those be addressed though with biodegradability and, you know, be looking at what rate of biodegradability is going to, for different types of materials for cellulose fibers or non-cellulose fibers?

MS. OAKLEY: Yes. I mean, I think that would then require an additional exploration of the paper listing which I'm not saying we shouldn't do. Because the supplemental newspaper TR definitely raised a lot of concern. And we didn't delve deeply into that in the most recent newspaper, Sunset. I mean, we did, but it was just a limited time. But it is definitely something that the subcommittee has discussed.

MS. ROTA: I'm just wondering if we shouldn't, you know, producers are already using paper pots. And we've allowed that extension of that while we work through these details and getting the National List updated to make it clear that we can have those materials, other paper materials, not just for compost, feed stock, and mulch. But

NEAL R. GROSS

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

can we work out some of these?

There's a lot of really important questions that you guys are grappling with. They're really technical. I don't know all the answers, but can we, we need time to really make the best decisions on that. And can we get the National List updated, and then continue working on that, and come back to it?

CHAIR BEHAR: Sue and then Steve.

MS. BAIRD: Thank you for your comments on vaccines. We're going to take a deep breath, as Jim said. We're going to talk vaccines now.

MS. ROTA: Okay.

MS. BAIRD: Yes, this has been an issue. We, who have been in the certification business forever, know there are some that interpret vaccines by 105(e), isn't it, because it has to be on the National List. There are some who interpret it, 603 says vaccines are allowed. So different certifiers, and sometimes the same certifiers, at different times in their certification actions, have interpreted this

NEAL R. GROSS

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

differently.

I confess, I wanted to be an ostrich and say let's just don't even bring this out here, right. Because now it's out in public which it was going to be anyway.

MS. ROTA: Yes.

MS. BAIRD: So what do we do with it?

It's a huge issue, and without vaccines we will lose the small amount of organic livestock production that we have. Vaccines are our only preventative measure to prevent diseases. Because once they get diseases, there's not a whole lot we can do as organic livestock producers.

So we've really struggled with this.

The best in between solution we could think of was to go with the commercial viability, availability. And I understand exactly what you're saying. It's going to be hard to verify those things.

There are some lists that's been brought to our attention, the FSIS documents and stuff that might list, and we say it might, because

NEAL R. GROSS

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

we're not actually inherently sure that they're going to list all of them, or at least by our interpretation of what excluded methods are.

And I'm talking instead of asking a question. I guess what I'm asking is if you're not wanting this, are you asking us to wait instead of moving on this discussion now?

MS. ROTA: I think that there's a lot of technical details to be worked out. You know, I mean, you hit the nail on the head. Like, the NOP's excluded methods definition is not a consistent definition for vaccine manufacturers, or FDA, or APHIS.

And so we need to work on, like, make the resources available. And I'm not sure how to do that, me as a certifier with a few hundred poultry operations. Like, I don't know that we ourselves have the resources. But collectively, as a community, can we come up with expertise and resources to help? I mean, producers aren't going to be able to find this information on their own --

NEAL R. GROSS

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

MS. BAIRD: Oh, no.

MS. ROTA: -- like they can with seeds.

And so I'm just saying, like, if we go this route, we need to make sure that we have the information and the resources available so we don't get just buried in the process of trying to evaluate things.

CHAIR BEHAR: Follow-up?

PARTICIPANT: I'm good.

MS. BAIRD: So are you advocating then that we put a wait period on it or at least a period to bring the certifiers the education they need to be able to regulate this?

MS. ROTA: That would be helpful.

CHAIR BEHAR: And are you aware that, I think it's two or three vaccines right now that are not available in a non-GMO, and that's all there is?

MS. ROTA: Yes. We're aware of that for some of the poultry vaccines.

CHAIR BEHAR: Okay, so how come that is so difficult to track? If there's only three right now, and by the time this gets implemented,

NEAL R. GROSS

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

if we pass it, that'll be another 18 months to two years or longer. So we would have those years to work on a system.

MS. ROTA: Yes.

CHAIR BEHAR: And we did have other certifiers who discussed that they could work on this together through an ACA. And the NOSB could also keep working on providing more information.

The urgency that the NOSB felt was the inconsistency right now out there in interpretation and trying to make it clear that just allowing GMO vaccines carte blanche, which is also being done, ones where there is a GMO, a non-GMO equivalent, that we felt that it was really time to kind of bring that consistency to the operators.

MS. ROTA: I don't disagree with you on any of those points, Harriet. The point I wanted to make is I think we need to be fully cognizant of what the challenges are and that we can't just say this is a certifier responsibility. We have to work together to figure out how to implement this. And it's great. We have time. Let's

NEAL R. GROSS

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

continue working together and find a way.

CHAIR BEHAR: Thank you. Scott?

MR. RICE: So I guess just to clarify, would you be comfortable moving forward with this recommendation knowing that it's a year and a half, or two, or more, as Harriet said, while we work together to bring those resources together and at least have the groundwork laid moving towards it.

MS. ROTA: Yes, as long as there's the commitment from the NOSB, from the NOP, to work together with certifiers.

CHAIR BEHAR: Great, thank you.

Okay, next up is Dave Carter, always wearing his nice hat, and after that, Blayne Mozisek with Leslie Touzeau after that. I'm sure I'm mangling some people's names. I'm sorry.

MR. CARTER: All right, good morning, Madam Chair and members of the Board. I'm Dave Carter, National Bison Association, Crystal Springs Consulting, and an alumni of this auspicious group.

From personal experience, I do want to

NEAL R. GROSS

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

thank all of you for what you do for the organic community. And for those of you that this is your last meeting, rest assured there will come the time you don't wake up in the middle of the night thinking about regulations and petitions. There is life after NOSB.

I've been working with the folks at Merck for the last decade or so. I was involved with the original petition to bring fenbendazole to this Board. And I think that it really demonstrates the commitment of the NOSB to making sure that materials are compatible with organic principles. The fact that fenbendazole was able to come on cleared the way to get something else off the board that many of us were concerned about because of its environmental impacts.

Now we're here to talk about expanding or annotating it for flocks. And when you think about it, from the beginning of the organic standards, there's been the push to get animals out of confinement, out of buildings, out on pasture.

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 I think the expectation of the organic community and consumers as well is that makes for happier, healthier animals. And that interaction between the animals and the soil is so important to what we consider the organic principles.

The challenge though is that the more we move those animals outside the more we increase their exposure to parasites, and particularly internal parasites as being the challenge.

And so as we encourage producers, and if we're ever going to move forward to get the animal welfare standards through, we need to make sure that the producers have the resources they need to be able to handle those emergency situations.

And fenbendazole is clearly the most compatible. It's been demonstrated that its effect on the environment, on dung beetles and earthworms, does make it the most compatible system.

The thing that I think is also important is the need to have these kinds of resources,

NEAL R. GROSS

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

particularly for smaller producers. You know, one of the things when we talk about the need to address, use other management techniques to address the problem, and a lot of it is rotating animals around pasture and the like, well, the organic standards are pretty clear about the time that we want animals outside and on pasture.

But when it comes to parasites, the important thing is, the time that they're off the pasture, you're able to break that cycle. And smaller producers with limited land bases sometimes have greater hurdles in doing that.

We run our bison on 7,800 acres with 16 inches of moisture. Rotating animals isn't a problem. But if you're a smaller producer, it is.

So those are the things that we think are very important.

I will just refer, as my time is running out, that the most extensive study was done in Denmark on pastured poultry. And clearly, the conclusion they wound up with is that they need to have these type of resources for those flocks

NEAL R. GROSS

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

to stay healthy and those farmers to stay economically viable. Thank you.

CHAIR BEHAR: Dave?

MR. MORTENSEN: I'm just wondering if you could just clarify or give your thoughts about other practices or the influence of stocking rate and moving animals from one paddock to another as a way of keeping the parasite load and exposure down for the poultry flock?

MR. CARTER: Well, to me it's not so much the stocking rate as it is the time to do that.

And, you know, that's what our experience in managing for parasites is. You've got to have the animals off of that pasture for a long enough period to break that cycle.

There isn't any strict formula, because it's dependent on soil, and climate, and vegetation, and from one year when you've got a lot of rain to another year when you don't.

You know, my experience, and most of my experience with parasite control is with four-footed critters. But, you know, yes, if

NEAL R. GROSS

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

you're in the West, where it's an arid climate, not so much of a problem.

Wherein you're in these types of climates, or you get more down to the southeast where I call it more of a petri dish, then it's just a real hurdle, in that difficulty and breaking that cycle is harder.

CHAIR BEHAR: Dan?

DR. SEITZ: So my question builds on Dave's question. One of my concerns is that, when you introduce a new medication to deal with a current problem, what you're really doing is perhaps facilitating a situation where you have less than optimal practices in place. And then you can perpetuate those practices.

So we did hear, for instance, that the way that some of these hen houses are designed, you can't rotate the pasture. The square footage available is very small.

So one of my concerns as a consumer is, okay, so we'll use a medication to deal with a situation where perhaps investment in different

NEAL R. GROSS

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

facilities or smaller flocks, the idea being that our job is not to maximize the most financially economical practice, necessarily.

So I think it's a little bit of a, I'm sorry, chicken-and-egg situation here. But maybe, without these types of medications, and perhaps revisiting some of the cultural practices, you can solve the problem to at least a reasonable extent.

MR. CARTER: Well, and I agree with you to an extent. Because I think one of the important things in organic principles and practices is preventative measures are the most important. But, you know, having corrective emergency measures are sometimes needed.

And the petition that we have in there, this is for an emergency treatment. It's not for routine use, which are clearly prohibited. We don't want to see, you know, if somebody's using it on every flock, that to me is not an emergency treatment. There's something that you need to take a look at.

But you've got such a variation in

NEAL R. GROSS

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

factors. Again, if you've got a really rainy season and exceptionally warm and, you know, with climate change we're going to see more of this variability, that you're going to have these issues crop up. And then you have an animal welfare issue, you know, that you don't, internal parasites are not pretty on animals and to their health.

And so to at least have a resource that they can draw on and say, okay, we've corrected this problem, now what are the preventive, what do we need to do in our management practices, I think that's something that the certifiers, you know, can work with the farmers on. This is not a, you're not using this as an emergency treatment.

There's something wrong with your management practices.

CHAIR BEHAR: Ashley?

MS. SWAFFAR: I like how you just look at me.

(Laughter.)

MS. SWAFFAR: So, Dave, a little bit about, I know you were the petitioner of this

NEAL R. GROSS

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

product. And obviously you petitioned it for a reason. Were you seeing the need from the poultry industry for all sizes of producers in different production practices that they need this and why alternatives aren't working? Can you talk a little about that?

MR. CARTER: Yes. I mean, what I'm hearing from poultry producers of all sizes is we're hearing the message loud and clear that they want these birds going outside. And we want to be able to accommodate that.

But what do we do then? I mean, when we've got then this risk factor that's going up significantly, you know, parasites live in soil and grass, and not on concrete. So you've got that exposure.

We need to be able to treat our flocks humanely if we're going to meet these expectations.

And I think I see that from, you know, we've heard that from producers of all scales.

CHAIR BEHAR: I have a couple of questions and comments. So since we don't have

NEAL R. GROSS

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

the organic livestock and poultry practices regulation as we had all hoped, really poultry has a totally different system than ruminants who are really, because they have to get so much of their dry matter intake, their nutrition from grazing that really forces producers to moving them around.

And we don't have that in poultry. The organic livestock and poultry practices, you know, did require a certain percentage of vegetation out there which was then going to encourage and actually mandate that the producers either have a significant amount of pasture for their poultry or rotate it so they would maintain that type of vegetation.

And of course, you know, from flock to flock, the chickens are rotated in the flock, but the pasture is not. And so if there had been worms or whatever, you know, it would be passed on to the next flock.

So we did work through a definition of emergency treatment and did talk about rotating.

So I'm just not sure how we're going to really

NEAL R. GROSS

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

get this with the poultry. And so I have concern that it might need to be used two or even three times in a flock.

And the fact that the residue of the product, even though the FDA says that residue is safe, it's not something I want to be advertising to the organic consumer, that we're just going to let you have a little bit of fenbendazole, but don't worry, it's okay.

You know, there is going to be, and it's in the eggs for at least two weeks or longer. And if it's used three times, that's a lot of, you know, exposure. So, I mean, this is a discussion document now. And believe me, I understand with climate change. We're having it on our own farm.

And then so there's this issue with trying to basically improve the system for outside access for the poultry. And then we did have quite a few public comments from certifiers saying that their smaller producers didn't need it, that they had actually better systems, because they moved the houses around or whatever. But actually, the

NEAL R. GROSS

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

smaller flocks have better access to cleaner pastures than the larger flocks.

And then the last, I know you're going to give me some input, but I wanted to know too if you could send us a link to the study that you were talking about from Denmark.

MR. CARTER: Yes.

CHAIR BEHAR: I would really like to see that.

MR. CARTER: Okay. Yes, it's footnoted in the petition. It's referenced in the petition. But I'll send you the link again, Harriet.

On the residue issue, I'm going to, Blayne is going to address that a little more significantly. I would just say the drop off in the residue is minor. The problem, when you have a consumer that breaks open an egg with a worm in there, that's 100 percent worm in the egg, whether they had a, you know, certain percent of that, and so your consumer expectations.

You know, when you take a look at the

NEAL R. GROSS

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

fact that, you know, Canada, the E.U., Japan, have all addressed this issue. And again, you know, particularly if you look at Canada, they talk about one use every 12 months. If you have to use it more than every 12 months, that's not an emergency, you know, treatment.

So I completely appreciate the fact that we've got to put the focus on management and preventative practices. But when your animals get sick, and something happens, we've got to take care of the animals.

CHAIR BEHAR: Thank you. Are you ready, okay, we're good.

MR. CARTER: And if I don't take a butterfly, do I get two pieces of chocolate?

(Laughter.)

CHAIR BEHAR: If you want to start out your day with chocolate, that's fine with me.

Okay, we have Blayne. Maybe you can say your last name for me. And then on deck is Leslie Touzeau. And probably I don't say that right either.

NEAL R. GROSS

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

Thank you, Blayne.

DR. MOZISEK: Yes, good morning, Dr. Blayne Mozisek. So I'm representing Merck Animal Health here, so we've submitted the petition. Merck launched this product in about 2016 to the US market. And I was charged with leading the tech part of the introduction to this product, so helping producers develop strategies to control these parasites that you see up here.

And I will tell you that this is really a personal project of mine. I have had numerous contacts with, we have a help line, basically, where producers can call in and ask for help. And speaking with the smallest of producers on the organic side to the large conventional producers, mostly these smaller producers needed help. And we saw that need, and we tried to drive this petition forward. So personal project of mine.

I want to address two main points. It sounded like they were comments made yesterday.

I wasn't here. But one is on the use of this product in these small flocks. How often will it

NEAL R. GROSS

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

be used?

One thing I try to stress with producers when they have programs, there's really no one size fits all program, I mean, the veterinary aspect, for me to take objective data that we get from the field and use that to drive our decisions, right, when it comes to treating these flocks.

The one data point that's going to most helpful here are fecal egg counts. So we take, it's a very simple test, we take fecal samples. We can put it in the sugar solution and float those eggs up to the top. And I can give you an actual eggs per gram number.

And so if we look, there's data already out there in the literature to suggest that if we set thresholds we can treat, based on when those eggs per gram numbers cross a certain threshold.

And those are the recommendations that I've made to producers.

There's two approaches. One, we can collect individual samples. For example, I go into a poultry house, I'll collect 20 individual fecal

NEAL R. GROSS

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

pellets and float those, and analyze those individually.

And then we can base our threshold on two units, one is the percent of the population that's affected. And then when that fecal egg number crosses a certain number of thresholds, for instance if 25 percent of the population had greater than 200 eggs per gram of feces, that would be my threshold to determine when to treat.

So there's also literature to suggest that that method, which is called targeted treatment, is better than the conventional treatment, for instance, if I treat every six months, right. So that method allows a producer to go out there and not sacrifice birds and also to use true data. That would be my one.

The second comment I wanted to make in regards to residues is that this product, yes, there are residues that are in the egg. The residues, the safe level of concentrations, to my understanding, and I'm not an expert on World Health Organization regulations, but the original number,

NEAL R. GROSS

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

which is 2.4 parts per million, if I remember correctly, was developed from WHO.

And fenbendazole at the highest dose, or at the highest level of residue at the last day of treatment, it's a five-day treatment, is less than half of the acceptable level that's allowed in eggs, so again, very safe, and a very low limit of residues in the egg. So I'd be happy to answer any other questions in regards to this.

CHAIR BEHAR: Dave?

MR. MORTENSEN: I am struggling with this petition. And what you just described, and thank you for your presentation, it was very clear, is integrated pest management that's used widely in conventional agriculture where then once the pest population, whether it's a weed or a parasite, or an insect, exceeds a threshold, we treat with something. In this case it's parasiticide, a pesticide. And if it was a weed, we would treat it with glyphosate or something. So could you just help me see how we're being internally consistent to allow a parasiticide using

NEAL R. GROSS

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

an integrated pest management threshold approach for a parasite? And I certainly see the difference between an animal being healthy or not, and a weed dying in a field or not, I guess from an ethical point of view, but I'm struggling to see how it's different in another way.

DR. MOZISEK: Well, as a veterinarian, you know, I'm charged with protecting animal welfare, right, and human health in terms of food safety. You can see from the pictures, this is some of the things I run into in the field, and from a bird welfare standpoint, the picture on the left, the feed passage through that intestinal tract is nearly impossible.

And so, you know, those numbers are real when we talk about birds not being able to gain weight, you know, affecting absorption of nutrients, et cetera.

So as Dave mentioned earlier, this is a resource for producers to do something when conditions get this bad, and protect bird welfare and also protect their product. Because the

NEAL R. GROSS

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

picture on the right is the consequence or potential consequence of having such high burdens in their flocks.

You know, and rotation, Dave mentioned a little bit earlier, rotation is an option for some producers. For the most part, the organic producers that I work with, they're in housing, and we can't rotate a true chicken house. They have outdoor access.

And sometimes it's in the literature that these worm eggs can last decades, right. So the sun has an impact, weather has an impact, et cetera, and time. But for the most part, once that burden is there, it's something that they're going to have to manage.

And in terms of housing, I've seen concrete floor, very top of the line houses that can be disinfected and thoroughly cleaned between flocks. And some of these houses also have significant burdens with intestinal worms, which is something that has to be treated to be on an independent basis in establishing a threshold of

NEAL R. GROSS

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

when that emergency occurs or preventing an emergency situation. It will be important for these producers.

MR. MORTENSEN: Yes. Thank you, that was helpful, thanks. And I am just continuing to think about, in reality, in conventional integrated pest management, most of the time the pest exceeds the threshold. And what the result of that is is that we're spraying all the time for something.

And I don't want to overstate it, but we spray routinely. And if the foundational problem that gives rise to the parasite outbreaks in the flocks is not addressed, it seems to me that we will be on a continuous parasiticide treatment regimen. And I'm just struggling with that. But thanks for the presentation.

DR. MOZISEK: You're welcome.

CHAIR BEHAR: Steve, Emily, Ashley, and Sue.

VICE CHAIR ELA: Well, I got in ahead of Ashley on a livestock issue.

(Laughter.)

NEAL R. GROSS

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

VICE CHAIR ELA: Two questions, I guess. One is you mentioned the residues, you know, decreasing. Knowing that organic consumers are very concerned about residues, would you have any problem if it were annotated to, I'm assuming you'd have the data for when that residue essentially disappears. I know it's a half-life of a half-life.

DR. MOZISEK: Sure.

VICE CHAIR ELA: Would that be fine to, you know, put some timeline after that use to help assure organic consumers that they're not having a residue of this material in their product?

DR. MOZISEK: So if I heard you correctly, so to establish that withdrawal time based on when the residue goes to zero?

VICE CHAIR ELA: Yes.

DR. MOZISEK: We have that data. The one thing, you know, what I would tell you is that, as these organic producers they've invested a lot in terms of the feed and everything else it takes to produce organic eggs, that anytime that they

NEAL R. GROSS

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

are not allowed to sell the eggs as organic, you know, is a significant loss, right, because they'll have to sell them as conventional.

That data exists, if I remember off the top of my head, it's like six days where the levels become non-detectable. It's a rapid decline in the residue levels.

Again, I think in the past there's been a precedent set with doubling the withdrawal time for organic products, if I remember correctly. And so here we have a zero day withdrawal for meat and eggs for this particular product.

So again, if you double zero, it's still zero, right. But instead of just pulling in an arbitrary number, if we had the safe level, the accepted level of safe, which was the 2.4 parts per million, for instance, cut that in half as opposed to doubling withdrawal time.

To me, we use the data, the science that's already out there, and have, you know, true science-based withdrawal times or whatever.

VICE CHAIR ELA: Thanks. And my next

NEAL R. GROSS

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

question would be if the egg masses can live for ten years, and this is an emergency treatment, I mean, you're not taking care of the egg masses. You're treating the bird, but then how do you prevent it from coming right back?

DR. MOZISEK: Well, it's also managing the outdoor access. So there are tools or things that the producer can do, for instance, tillage of the soil, for instance, mix those eggs into the ground, good cleaning and disinfection.

Even though I gave the example of a concrete house that can have a significant problem, that doesn't mean they don't need to clean and disinfect between flocks. There are tools that can be used, resources that producers have to manage those egg burdens.

But again, you know, there are regional issues that drive higher burdens. You know, for instance, if I go to California, I see very few intestinal worm parasites. But they have gizzard worms. There's other parasites going on. In the southeast I see a lot of this.

NEAL R. GROSS

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

So there's tools that they can use, resources they have to manage those paddock areas.

But they are limited, because for the most part these houses are in fixed locations, right. And they can't move an entire house to rotate those poultry.

CHAIR BEHAR: Thank you. And next was Emily, then Ashley, and Sue.

MS. OAKLEY: Two questions. One, on average, how frequently are the houses cleaned out of manure? And secondly, is the fact that the birds are living in manure, basically, compounding the risk exposure for these parasites?

DR. MOZISEK: Clean-out is really dependent on a lot of different issues. And it varies by producer. I will tell you, from a veterinary perspective, there's pros and there's cons to what we call raising poultry on built up litter.

Built up litter, if you look at it this way, from my mind in a veterinary perspective, is four inches of competitive exclusion. It's, for

NEAL R. GROSS

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

the most part, it's good bacteria.

When I change litters, I clean out completely, have new bedding, pine shavings, whatever it may be, to put those birds down. It's sort of a blank slate. So any sort of bacteria they were to pick up, if it were Clostridium, or a negative bacteria, I'll just put it that way, those lead to significant challenges.

Whereas a built up litter system, basically that bird has a good flora introduced to the system from day one. So that's, in my opinion, in my experience, built up litter systems outweigh the positives from cleaning out every time. With that said, we do have issues with potentially building up parasites.

Now, there is one thing between flocks.

That built up litter also produces ammonia as the byproduct, that nitrogen breakdown in that litter.

Ammonia has its own disinfecting properties, right. So down time between flocks, which is another resource that producers will have to control these, that ammonia produced by the built

NEAL R. GROSS

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

up litter will inactivate and is one of the good things actually, and activate worm eggs, and coccidia, and bacteria, and viruses too. So that's a positive there.

And your second question, I'm sorry?

MS. OAKLEY: I think you answered it.

DR. MOZISEK: Okay.

CHAIR BEHAR: Ashley and then Sue.

MS. SWAFFAR: I have lots of questions too. Glad to be back with a vet. We normally have, in the chicken industry, have vets go on right before lunch. So they have the ---

DR. MOZISEK: Yes, I was going to say sorry.

(Laughter.)

DR. MOZISEK: Disturb your breakfast.

MS. SWAFFAR: So can you go through and show what each of those pictures represent?

DR. MOZISEK: Sure. I was going to have some video, but I figured it was too close to breakfast to do that.

So on the left we have, this is an

NEAL R. GROSS

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

organic flock, colored chickens. So obviously, there is a significant, I'll try to point to both pictures, but significant number of burdens in these flocks.

I will tell you that when I see this in the field, before you even open this intestine up, that serosal surface, the outside of the intestine, is undulated. It's ballooned, it's not normal.

And it's partly because or mainly because these, this is an intestinal scraping. So if I took this intestine, remove the, sorry, I have to point at one at a time, but if I remove those worms from that intestinal tract, and took a scraping, and looked at it under the microscope, I can see these, basically what we call L2, L3 stages, the very larval stages of the worm. They're migrating through the tissues. And they're causing inflammation and damage.

And the result of that is we get inflammation in the intestinal tissue, and not necessarily swelling but thickening of that

NEAL R. GROSS

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

intestinal wall. So that's these two.

Here, this is from a turkey, actually, organic turkey that's suffering from blackhead disease. Now, this is obviously not a layer issue, but this is the result, this happens. The cecal worm which is actually on the label of fenbendazole to control the cecal worm, it carries a disease, histomonas.

And so histomonas causes blackhead disease, which are these liver lesions, and significant mortality in turkeys. So by controlling the cecal worm, we can affect this disease. And this disease can cause 90 to 100 percent mortality in turkeys. And then on the right, obviously that's an egg. That was sent in by a customer, organic egg with a worm in it.

And so this process is the reproductive tract and the intestinal tract empty into the cloaca of the chicken, you know, the common sewer, right.

That's what the word cloaca translates to. And these worms are still alive and have the ability to migrate back up the reproductive tract from the

NEAL R. GROSS

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

intestinal tract. And they end up encapsulated in the egg.

So this is a very real threat to egg producers. And this happens both conventionally and in organic flocks. Obviously, the higher the burden the more likely this is to happen. And if you're a customer and you crack open an egg, you're not very happy.

MS. SWAFFAR: So you work with several flocks then. I just would like to hear what some of the producers are doing for alternatives before fenbendazole and kind of why we're at this stage of you guys petitioning for this material.

DR. MOZISEK: Sure. So diatomaceous earth has been the kind of go to for control of these intestinal parasites. I mean, that's really the only real solution they have. And the comments that have been given to me, and experiences that I've seen in the field, is that there's very little, if any, effect from diatomaceous earth in terms of the worm burden population.

I have heard, I mean, I know of one

NEAL R. GROSS

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

producer that, in certain flocks, he believes that it does have an effect. But for the most part, they're looking for a solution, because this is what's going on, even in the face of diatomaceous earth. There may be a reduction in the burden, but it's not controlling the population.

CHAIR BEHAR: Sue?

MS. BAIRD: Thank you for this presentation. It's been very informative. It's interesting, because Dave and I heard the IPM totally different. I'm thinking as a certifier how would I ever, and we've struggled this, how would we ever quantify what emergency treatment is. And you gave us some real numbers, and I like that.

And just a comment is that IPM is not just used for conventional crop producers. IPM is actually mandated by the pest hierarchy which is A, B, C, and D, and E. And if all else fails, then we use a product that's not a prohibited substance. Now, there is a caveat that says provided that it doesn't get into the organic product. And

NEAL R. GROSS

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

that might be an issue.

But I do appreciate this. And it did give me some comfort in that we could define what an emergency treatment would be. And I think that's been one of our struggles as we went through this. Because the term for emergency has not been codified by the NOP. How do we therefore move into some kind of a quantification of emergency. And I appreciate your help on that.

DR. MOZISEK: You're welcome.

CHAIR BEHAR: Rick, and then I have a question --

(Simultaneous speaking.)

MR. GREENWOOD: Just a quick question, since, from a food safety standpoint, eggs should be cooked when they're eaten, does the residue disappear under heat? Are there any studies that show that it is? Because if it's true, then it's a non-issue.

DR. MOZISEK: Correct. You know, I'm not aware of that data. I just don't know. But certainly we could --

NEAL R. GROSS

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

MR. GREENWOOD: I think that would be a good thing for Merck to look at.

DR. MOZISEK: Okay.

CHAIR BEHAR: Okay, I have a couple of questions. And then we'll go to Dave.

I also appreciated, you know, having maybe some levels that would help us with that emergency treatment, you know, when we reached emergency. But I thought that the main way people found these was through autopsy doing posting. And you say there's a fecal sample way of tracking, and I'm wondering if that's universally available to producers.

DR. MOZISEK: It is. So it's commonly utilized across food animal species, so we utilize it on the cattle side, and the pig side too, to monitor populations without having to sacrifice animals, right. So often, when these worm burdens get very severe, we can find live worms on the floor. And it's not uncommon.

But yes, fecal samples are very simple. The test is actually just a fecal sample, you float

NEAL R. GROSS

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

it in this very specific sugar solution, in terms of the concentration, so that basically the specific gravity of the egg is lighter than the solution. They float to the top, and you put a slide on top of there, and you can count the eggs.

So very simple ---

CHAIR BEHAR: When we have a proposal, that could be another resource that we put in there.

So it was in public comment, and I have seen this also written as far as natural alternatives beyond diatomaceous earth. But what about pumpkin seeds? Is that just kind of an old wives' tale? But it was in public comment.

DR. MOZISEK: You know, I think there's a laundry list of alternatives. Now, in my experience, or at least to my knowledge, there's no data to support that any of those are actually, you know, reliable or effective. So I can't speak to all of them, and I'm not familiar with pumpkin seeds.

CHAIR BEHAR: Okay. And then lastly, if we annotated this for only once in a flock use,

NEAL R. GROSS

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

would that be sufficient and give us the animal welfare we're looking for?

DR. MOZISEK: You know, again, I think that goes to, like, a one size fits all program to say that we can use it one time. There's nothing that suggests that they could come back and need a second treatment. I think once is better than no options at all.

But I think, again, not only to utilize it for the betterment of animal welfare, of the bird, but also to manage the tool, the resource, that if we only use it once, if we're giving producers the ability to use it once, if it's not used correctly, there's a potential too for a resistance development, and then we lose that tool as well.

So we need to make sure that the tools, the resources that our producers have, that they can use them effectively and make that resource last as long as possible.

CHAIR BEHAR: Have we found resistance to, like, roundworms to fenbendazole?

NEAL R. GROSS

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

DR. MOZISEK: To my knowledge, in poultry, no. Fenbendazole, the resistance in horses is significant. This product has been around since, I think it was first patented in 1973.

And so there are some species where, really, it's been the only option they had. And overuse, which is obviously something we're trying to prevent here, has contributed to some resistance development.

CHAIR BEHAR: Okay, I have --

MR. CHAPMAN: Point of order.

CHAIR BEHAR: Yes?

MR. CHAPMAN: Where are we at in the schedule?

CHAIR BEHAR: We are about a half-hour behind.

MR. CHAPMAN: Just the half hour?

CHAIR BEHAR: Yes.

MR. CHAPMAN: Okay.

CHAIR BEHAR: So I have, we have such an expert up here.

MR. CHAPMAN: Yes.

NEAL R. GROSS

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

CHAIR BEHAR: I have Dave on the line, Ashley, and then Sue. And then after that, I'll cut it off. So Ashley says never mind? Okay, I have Dave and Sue.

MR. MORTENSEN: Yes, just quickly, you know, I raised the IPM issue because some of these decisions we're making, you know, trying to have a clear logic and process that we're being consistent with is obviously important to all of us. And I'm struggling with seeing how this is different than conventional agriculture. So that's all.

CHAIR BEHAR: Sue?

MS. BAIRD: Just addressing a follow-up, I think, because you said you have seen some resistance over time.

DR. MOZISEK: In horses.

MS. BAIRD: The life of a flock, the egg producing is how long?

DR. MOZISEK: It varies from, I would say, 90 to 120 weeks.

MS. BAIRD: A hundred and twenty weeks?

NEAL R. GROSS

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

Has there been any study that there could be resistance in 120 weeks in the animal?

DR. MOZISEK: This product has only been available to the egg industry for a year and a half, if I remember right.

MS. BAIRD: Oh, so you haven't had time to collect that data. Okay, thank you.

CHAIR BEHAR: Thank you very much.

DR. MOZISEK: You're welcome.

CHAIR BEHAR: I think we might be contacting you again.

Next up is Leslie Touzeau, please state your name so I know how badly I said it.

MS. TOUZEAU: Sure.

CHAIR BEHAR: On deck is Tasha Olson and then Garth Kahl after that.

MS. TOUZEAU: Okay, good morning, Board members. My name is Leslie Touzeau, and I am the material review specialist for Quality Certification Services.

Thank you for this opportunity to provide comments pertaining to the petition to add

NEAL R. GROSS

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

fatty alcohols to the National Lists. And thank you for your work to preserve the integrity of our organic community.

QCS strongly supports the addition of synthetic fatty alcohols to the National List at 205.601. Prior to the original petition to add fatty alcohols to the National List, QCS determined, based on the testimony of experts, that fatty alcohols were non-synthetic, and we allowed them for use by our 50-plus tobacco growers.

After the NOSB recommendation to exclude them from the National List, the NOP allowed QCS clients a use-up period for fatty alcohols for the 2019 season. The previous exclusion of fatty alcohols from the National List was due in part to little evidence for essentiality in organic production.

By now, I'm sure the Board is aware that fatty alcohols are, in fact, essential to our organic tobacco producers. As a representative of our QCS tobacco clients, I would be remiss if I did not add their voices to this discussion.

NEAL R. GROSS

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

QCS surveyed our tobacco farmers, and all 31 respondents indicated that fatty alcohols were critical to the success of their operation.

They were unanimous in their agreement that there is no effective alternative to fatty alcohols for tobacco sucker control.

They reiterated information provided by the North Carolina State Extension publications that good sucker control using fatty alcohols can reduce the attractiveness of their crop and deny a source of food to budworms, hornworms, and aphids.

Furthermore, like other farmer comments, our clients emphasized the detrimental economic impacts to the organic tobacco industry if fatty alcohols are excluded from the National List.

I could expound on my written comments where I presented the argument that economics are foundational to our organic agricultural system that exists within a market economy. However, I realize that economic viability is not one of the several OFPA criteria listed at 6518(m). So we must

NEAL R. GROSS

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

turn our attention towards these criteria.

The technical report and the summary of petition documents found that fatty alcohols are not environmentally detrimental. They break down readily after use, they have no negative effect on human health, there are no effective alternatives, and they are compatible with a system of sustainable agriculture, especially when grown within an organic system that includes other crops in rotation.

I believe there are parallels to be made here between fatty alcohols and ethylene gas which is listed on the National List at 205.601(k) as an approved plant growth regulator for pineapple flowering.

Like ethylene gas, fatty alcohols are growth regulators that have been petitioned for use on one crop. Also like ethylene gas, fatty alcohols can be considered a crop production aid under OFPA 6517. This precedence, along with the OFPA criteria, creates an easy path to justify the addition of fatty alcohols to the National List.

NEAL R. GROSS

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

We are all aware of the public health impacts of tobacco. But this should not influence the Board's task to make a recommendation for material based on whether it meet the necessary criteria. QCS believes fatty alcohols meet these criteria.

We urge the NOSB to recommend the addition of fatty alcohols to the National List.

If the vote passes, we also implore the NOP to act swiftly and allow the use of fatty alcohols for the 2020 growing season.

CHAIR BEHAR: Questions? Thank you.

MS. TOUZEAU: Thank you.

CHAIR BEHAR: So next up is Tasha Olson, and on deck, Garth Kahl and Jay Feldman.

MS. OLSON: Good morning. I'm Tasha Olson, and I'm the director of Quality and Compliance at Fiberstar Inc. Of course, we make Citri-Fi which is made of dried orange pulp.

I'm here today to support approving dried orange pulp, Substance 205.606, to remain on the NOP list. It's our understanding that

NEAL R. GROSS

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

during the preliminary stage it was decided that it was not necessary or consistent with organic handling, and alternatives exist.

So I'd like to just counter that a little bit today. But I also have some statements regarding the program itself and how it's helped us.

Questions arose regarding pesticides by the orange industry. Of course, that has always been a large concern of us. What we do is we run a strict pesticide protocol by certified labs, all raw crops, final products produced.

We run them against the residue limits that are in the United States as well as the E.U. Commission. We also have full traceability back to all of the crops that we use.

It was also mentioned a lack of comment during the comment period regarding the support for this product. Those who do use our product at this point, part of it's my fault, because I did not reach out due to some health reasons, but not an excuse.

NEAL R. GROSS

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

We also feel that our customers are sensitive to providing their supplier lists, and that makes them a bit uncomfortable when they're using a brand new bio ingredient or something that's very innovative.

But we do, at this time, have nine projects in the United States that are under review with large companies. And we have six commercialized products.

I want you to know that, with the support of this organization, we recently launched our first official series that could be organic compliant with a dedicated US sales staff which was very exciting for us. We are in full support of all unique uses of agricultural products that benefit organic and all natural markets. That is what our passion is at Fiberstar.

And I think we wanted the opportunity today to let you know that we think that the NOP Agricultural List that's allowed is a fantastic stepping stone to organizations of raw materials that are organic that would like to eventually have

NEAL R. GROSS

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

full certification and support of the organic market. That is regardless of whether you vote to keep us on.

We realize we're used at less than five percent, so I don't know that it affects our market greatly. But we do think that that list, the list specifically, has a lot of weight in marketing and in selling products, that being on that list is far better than trying to explain that you can be at five percent or less. And so we'd like to, not only ourselves but everybody else who does agricultural science, to be able to be supportive and be on that list.

Any questions?

CHAIR BEHAR: Steve?

VICE CHAIR ELA: So we had one public comment that said there are a number of organic orange processors that have product available so, I mean ---

MS. OLSON: Yes.

VICE CHAIR ELA: -- we have to ask the question of why aren't you using organic, why does

NEAL R. GROSS

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

it have to be listed at all?

MS. OLSON: Great question. It's twofold. The one product on the market right now, which is extremely functional, that is from dried orange pulp, has to be produced from wet orange pulp.

Our biggest problem is vicinity. So we have to get pulp that's wet within eight hours of our plant to be able to get it in, or else it starts to degrade.

The other point I want to make, and part of us growing our business and being a young science company is that we're always working on other substrates as well. And so we do have things in development where it might be an easier raw material to be organic and to bring in, which is where we'd be able to leverage more of a certification for ourselves. But being small, we just don't have that yet. So that's the situation with the orange pulp itself.

CHAIR BEHAR: I have a couple of questions.

NEAL R. GROSS

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

MS. OLSON: Sure.

CHAIR BEHAR: So have you worked with your current suppliers of organic pulp to see if any of them might be interested in becoming organic?

MS. OLSON: You know, they're very large producers at this point. I don't believe they are interested in a complete organic certification. It's very difficult at our facility right now. We're actually attached to a juicer, to a juice plant for proximity. So that hasn't really been something that they're willing to do.

CHAIR BEHAR: Have you asked them?

MS. OLSON: Oh, yes.

CHAIR BEHAR: Oh, okay.

MS. OLSON: Oh, yes, I'm sorry. That's always part of our conversation.

CHAIR BEHAR: Are there organic products right now that contain your dried orange pulp?

MS. OLSON: Yes, there are.

CHAIR BEHAR: Okay. And is your

NEAL R. GROSS

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

process proprietary ---

MS. OLSON: It is.

CHAIR BEHAR: -- or patented?

MS. OLSON: It is.

CHAIR BEHAR: So there's no other company who can make this dried orange pulp except you?

MS. OLSON: Not without our license. But it's not just dried orange pulp. The way that we utilize it, if you just dried orange pulp, it wouldn't be the same as our product. We do all mechanical processing. So it's still just orange pulp chemically, but it wouldn't be comparable to just orange pulp.

So we process it. It is patented. Unfortunately I realize there are some limitations in that at this point. Further down the business line, would we love to sell the technology? Of course we would.

CHAIR BEHAR: So is our listing maybe incorrect? Because right now, we're allowing the use of non-organic dried orange pulp for someone

NEAL R. GROSS

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

who maybe wants to put it in a, you know, energy bar or something. I don't know.

MS. OLSON: Sure.

CHAIR BEHAR: Because of the way it's listed, maybe it should not actually be listed as dried orange pulp, because your product is unique from that actual, general listing. Is that correct?

MS. OLSON: Yes. I understand the question. I think it's debatable either way. As a scientist, the thing that makes it difficult is that it still is dried orange pulp. There is nothing done to it. It's all mechanical processing.

However, you're right. In our case, luckily nobody else is drying orange pulp. So it's just us, you know. So that's kind of the debate. Either way, we go in at five percent or less.

But I think the biggest thing that we also wanted to communicate is how useful it has been to be on that list as agricultural. Because it allows science companies to come up with other

NEAL R. GROSS

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

very natural ways to replace some of the synthetics and chemicals that have to be used. Because there isn't another alternative. It was probably more of a who-knows, just the program and how much it's helped us.

CHAIR BEHAR: Right. And so if it was not on the list, then the labeling category would be made with organic if someone wanted to use it?

MS. OLSON: Yes. I mean, they would just use that five percent rule. The impact of the list is great. But more of it is we think the importance of having agricultural products other than us, and just understanding the importance of the list.

CHAIR BEHAR: Ashley? Oh, Tom?

MR. CHAPMAN: A couple questions and a clarification. You keep referencing the five percent exception. I want to make sure you understand fully what that means.

In an organic product you have to use 95 percent organic ingredients. That five percent allowance, you can only use items that are on the

NEAL R. GROSS

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

National List so if this item falls off, that five percent rule's no longer relevant to your products.

MS. OLSON: Oh, we misunderstood that.

MR. CHAPMAN: It has to be in the made with organic category which is what Harriet was referencing.

MS. OLSON: But it still would be made with organic, correct?

MR. CHAPMAN: Which is a different claim although you can't use the seal and there's other requirements in that.

MS. OLSON: Exactly.

MR. CHAPMAN: Yes.

MS. OLSON: We do understand that.

MR. CHAPMAN: As an agricultural product. I also want to clarify that we don't put brand names on the National List --

MS. OLSON: No.

MR. CHAPMAN: -- for proprietary products which is probably why it got the generic dried orange pulp and I believe your spec sheet it says that's an appropriate labeling if --

NEAL R. GROSS

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

MS. OLSON: Yes.

MR. CHAPMAN: Yes. So that's probably the explanation for the term.

I wanted to ask about your, you made reference to potentially having a certified organic product in the future?

MS. OLSON: Yes. I mean, it's further out but it's in our five-year plan right now.

MR. CHAPMAN: Would it be a dried orange pulp?

MS. OLSON: It would not be orange pulp.

MR. CHAPMAN: So then would it have, and I know it's still --

MS. OLSON: I shouldn't divulge too much.

MR. CHAPMAN: I know it's still in R&D and it's proprietary to you but then I'd assume that would have different functional properties potentially and not be a one for one replacer with dried orange pulp?

MS. OLSON: Well, what we're learning through the science, it's different but it's still,

NEAL R. GROSS

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

it's viable within the, you know, within the food market. It just has some different properties.

MR. CHAPMAN: Yes. So it would be a certified organic product. I assume even when that's in the marketplace, if you don't have an organic dried orange pulp supplier that's economically viable for you even with that other product --

MS. OLSON: Right, even with that other product.

MR. CHAPMAN: -- you'd be asking for this to be retained, I imagine?

MS. OLSON: Right. We would like that. It helps as our steppingstone.

CHAIR BEHAR: Asa?

DR. BRADMAN: Just to --

(Simultaneous speaking.)

MS. SWAFFER: So nice today. How close is your processing plant where you make the dried orange pulp to a certified organic plant that has the wet pulp?

MS. OLSON: To my knowledge, it's to

NEAL R. GROSS

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

the north.

MS. SWAFFER: Yes.

MS. OLSON: And it would be about nine hours transit.

MS. SWAFFER: One hour outside the, well of what you said you needed, eight hours?

MS. OLSON: Right. And it isn't that we wouldn't try to squeak that if we could. It becomes very difficult though because then you'd pay for the wet pulp to come all the way down and if it's fermented then it has to be thrown away.

MS. SWAFFER: So if we were to delist this product, could you make it organically?

MS. OLSON: No.

MS. SWAFFER: And what are your barriers for making it organically?

MS. OLSON: Being able to get it there in time and the volume. It takes one tanker of what we get because we only use the byproduct water that comes off to make a pallet of our product. So the volume alone especially after Irma went through, we wouldn't be able to do it.

NEAL R. GROSS

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

MS. SWAFFER: Thank you.

CHAIR BEHAR: Asa?

DR. BRADMAN: I think you just answered my question by mentioning Irma.

MS. OLSON: Yes.

DR. BRADMAN: So the, your facilities are in Florida?

MS. OLSON: Yes.

DR. BRADMAN: Have you looked at other regions of the country where you might have better access to organic product?

MS. OLSON: Organic pulp, we do need wet. We've looked at it frozen. One of our biggest obstacles in that sense though, is that California produces most of their oranges to be sold as oranges, not as juices and that's been a big obstacle. So we looked into that.

We thought, oh, if we could freeze it and send it that we may even be able to get barrels from outside the U.S. but it degrades it too much to be functional and to be able to use.

DR. BRADMAN: And then the follow-up

NEAL R. GROSS

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

question. You mentioned a few times about the value of marketing --

MS. OLSON: Yes.

DR. BRADMAN: -- of having your product on the National List. But is that marketing in the organic sector or marketing in the non-organic sector or just as a more, just as a food ingredient?

MS. OLSON: Actually the comment, it was probably more geared toward the value of your list and not necessarily, I mean, obviously it's important to us as far as going to organic customers. That's not anybody else.

The list is important. The list has a lot of respect within the industry and that has been a great advantage for us so more, the comment was really more not only us but any other agriculture biotechs that are out there trying to make natural ingredients to replace other functions, that that list is so valuable.

CHAIR BEHAR: Tom, what I was trying to get at was trying to understand that this product is really maybe somewhat different than a generic

NEAL R. GROSS

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

dried orange pulp and trying to really kind of hone in on what is not truly not commercially available as organic.

But it seems like that our listing, we can't really call it anything other than that much greater --

MS. OLSON: Yes. Had a listing.

CHAIR BEHAR: Yes.

MS. OLSON: Yes.

CHAIR BEHAR: Which, you know, to me I, you know, it's unfortunate. You know, I'd like to be a little bit more honed in on exactly what is not commercially available as organic.

MS. OLSON: Absolutely.

CHAIR BEHAR: Rather than a greater listing.

MS. OLSON: But even in our situation, if we can and hopefully there'll be, you know, a lot of rebound in Florida so that we get some more organic groves up and running.

The ones that were decimated, you know, it takes three years to replace those groves. It's

NEAL R. GROSS

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

been a real hit but if we can and we get some more closer and we can bring them in, we're still the only people making, that are actually drying orange pulp for that reason except cattle feed.

CHAIR BEHAR: Now are you doing anything overseas? I know quite a bit of organic oranges are grown in Brazil.

MS. OLSON: Yes. Absolutely.

CHAIR BEHAR: And there's a lot more

--

MS. OLSON: We're working with Brazil, Argentina, and Mexico right now to work on the other product. We can't, we tried to freeze their pulp and we can't use it. So the other products we're developing made of peel, we can't source organic from that, from outside, and some from inside.

CHAIR BEHAR: Okay. Thank you.

MS. OLSON: Thanks.

CHAIR BEHAR: Did you all hear me? Garth Kahl, Jay Feldman, Lynn Coody?

MR. KAHL: Hi. My name is Garth Kahl and I've been a proud certified organic farmer since

NEAL R. GROSS

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

1993 and an organic inspector and reviewer since '96.

I want to thank the members of the Board for their work and offer them my sincere apologies for not submitting written comments this session.

I know and appreciate the hard work you put into posing serious questions to the organic sector.

I did my research on many of the items on the docket this session and even helped IOIA draft their comments but when it came down to the deadline, life intervened.

In a nutshell, I want to echo to cogent and detailed comments submitted by OTA and IOIA with respect to GMO vaccines, embryo transfer, seed integrity and the need for a predictable, stable National List.

I also think the prohibition on paper pots has to qualify as the most embarrassing organic hypocrisy of the year and I urge you to find a way out of this self-imposed labyrinth.

In short, my comments come down to this.

NEAL R. GROSS

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

We need to limit the minutiae, facilitate a stable regulatory environment, and concentrate on the real threats to organic integrity and ultimately, life on the planet.

The Haber-Bosch process is one such threat to life on the planet. The IPCC has told us that we basically have ten more years to prevent cataclysmic environmental collapse.

The Haber-Bosch process by which synthetic nitrogen fertilizer is manufactured accounts for roughly ten percent of carbon emissions from agriculture.

That's even more than all of us hypocrites who burn kilojoules of jet fuel in the name of sustainability.

In a similar vein, as others have remarked, North America has lost 30 percent of bird population since 1979. With this in mind, we need to be concentrating all of our efforts on bringing massive, massive amounts of acreage under organic production.

My own operation is a small family

NEAL R. GROSS

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

owned, pasture based and uses virtually no outside fertility inputs.

I also work with a cow calf operation that is corporate, Trump-supporting, and has over 7000 acres under organic production with more added every year.

That equates to thousands of pounds of synthetic fertilizer not used and not creating a dead zone at the mouth of the Mississippi. Impact, scalable impact.

We need to address what is preventing us from scaling up organic production, attracting new growers, and stop fighting over five percent market share.

We need to not be afraid of growth, of success, of big growers who don't talk and farm and vote like our vision of what organic should be.

We need to defend our brand and markets from real fraud, work to reduce GMO contamination, but understand that operations that don't meet our personal vision of organic can and do comply with

NEAL R. GROSS

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

the rule.

That includes dairies milking 60 cows and 6000 cows, farms growing .05 acres and 5000 acres, and processors bottling product in their kitchen and those with breweries in a half dozen domestic and international locations. Thank you.

CHAIR BEHAR: Emily?

MS. OAKLEY: I was surprised that you didn't have written comments and I actually checked twice because I thought I must have missed something. Could you elaborate on the labyrinth that you think we've created for ourselves with paper pots?

MR. KAHL: Yes. I mean, we allow cardboard, we allow paper mulches, we allow paper banding on orchards to control codling moth.

At the end of the day, you know, to quote the queen mother in Hamlet, I think she doth protest too much.

Yes, there are small amounts of synthetic fibers or synthetic materials in the glues but at the end of the day I think we need

NEAL R. GROSS

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

to allow this practice for growers who want to use it.

This is one thing that as an inspector I've actually had small, very small, like local family scale growers say, this is integral to my growing operation. I need it, it's a labor saving device. Please, this seems silly. Why are you, you know, why are you focusing on this?

It's minutiae. You know, yes, there may be small amounts of synthetic fiber. Somebody argued up here, well, what if there's high amounts of synthetic fiber in the pots?

Honestly, if there's that high amount of synthetic fiber in the pots, they won't degrade.

On my own operation we did try this for a while.

In our situation with well-drained soils using drip irrigation, they never degraded.

So the plants could never grow out of the pot. So we discontinued the practice.

Now in somebody else's operation in heavier soils with overhead irrigation, maybe the pots degrade but at the end of the day we need to

NEAL R. GROSS

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

get out of the way and let growers farm organically.

I think on the big scale of things, this is a, you know, it's a minutiae. If we can get more growers growing organically by allowing this practice, then let's do it.

CHAIR BEHAR: Dan, and then Dave?

DR. SEITZ: So I agree with you that if you can practice within the organic standards, the size of your operation should not matter.

But what I understand from my own reading is that there are sizes above which it is almost technically impossible say to work within the standards.

So if you take a dairy farm and you have to pasture the animals for a certain amount of time on pasture, just physically getting a very large number of animals out to pasture and back in may preclude the ability to actually meet the standards.

So how do you balance your thought, your what, your assertion that we should not be afraid of size if you're meeting with the standards with

NEAL R. GROSS

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

the fact, with the idea that there may be sizes above which you really technically cannot meet the standards?

MR. KAHL: Well, I've inspected hundreds of dairy farms in my career and yes, there is a limit as to how far you can get a cow to walk.

So at, you know, at over a half mile, growers start saying, well, she starts losing a little bit of energy and she's not producing as much milk. You get up to one or two miles and growers don't like to do that.

So obviously there's design issues. We can evaluate. I mean, organic inspectors and certifiers are good at confirming compliance. So if we say, you know, it's thirty percent DMI from pasture, you know, I guarantee you the vast, vast majorities out there with a few bad actors are complying with that.

So if we say that's the rule, you know, divide your barns up, have one barn here, have one barn there, you're still milking 5000 cows but you got, you know, five barns of a thousand cows each

NEAL R. GROSS

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

or something like that.

That's not our place to dictate that.

Our place is to dictate a bar and say, okay, you comply with that bar.

I mean, ultimately we may as a community want to raise that bar. We might want to say, you know what, 30 percent DMI, that's too little.

You know, I've heard people say, well, 50 percent DMI, 60 percent DMI, absolutely. But let's get them in the door and then let's raise the bar, give them time to adapt their breeds, less Holsteins, more Jerseys, more Guernseys, more, you know, better genetics.

But, you know, set a bar and then people can comply with it and maybe at some point there are scales that can't comply with it. But there's some very big dairies that are managing to comply with the rule as it is written today.

DR. SEITZ: And just a follow-up and this is just for my own information. When you say there are bad actors out there, is that because you have certifiers who are turning a blind eye

NEAL R. GROSS

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

to them?

What are, why are there very large operations out there that don't comply? Who is failing in their carrying out their regulatory responsibility?

MR. KAHL: I wouldn't even say that by and large the large operations aren't complying.

Some of the worst compliance issues I've seen is on small operations.

I mean, the large operations have a brand to protect and they've got, you know, half a dozen people and they hire consultants like me to make sure that they're meeting that 30 percent DMI.

I mean, you know, they may look bad. Somebody may fly a drone over it midday and say they're not grazing but are they taking into account night grazing, are they taking into account, you know, shoulder grazing? So grazing April, May, but keeping them in the barn June, July, and August?

Compliance is something that, you know, certifiers and inspectors I think in general do

NEAL R. GROSS

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

a pretty good job with and where you, well, where you're seeing non-compliance cropping up is across the board and in my experience it doesn't necessarily equate well to scale. There are non-compliant actors on both ends of the spectrum.

CHAIR BEHAR: Dave?

MR. MORTENSEN: Yes, I just wanted to thank you for the clarifying comments on paper pots. Thanks.

MR. KAHL: Thank you.

CHAIR BEHAR: Thank you, Garth.

Okay. We are kind of falling, we are about 45 minutes behind. I'm sorry, Jay. But okay, so Jay, then Lynn Coody, then Michelle Smolarski.

MR. FELDMAN: Hi, good morning. Jay Feldman, Beyond Pesticides and the new project, Organic Eye.

Yesterday you were told about the nightmare by Terry Shistar. I want to tell you about a love story. Remember Dan Barber's talk, How I Fell In Love With a Fish? As a chef of Blue

NEAL R. GROSS

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

Hill at Stone Barns he explains the essence of organic practices from bass to beef cattle.

My love affair with organic began at a very young age when I met farm workers poisoned by pesticides and I was told about pesticide induced diseases, about miscarriages, about birth defects caused by farm chemicals. I fell in love with organic as a solution to unimaginable problems of human destruction.

My love for organic grew stronger when I joined with organic family farmers to tell policy makers that the poisoning was not necessary to grow food.

Then I learned that the chemical use was destroying ecosystems that support life. Trophic effects were being ignored by regulators who did not consider whole system effects. My love affair with organic grew deeper.

The creation of OFPA was a marriage of ideals, values, principals with standards, democratic decision making, transparency, true participation in stakeholders, in leading

NEAL R. GROSS

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

government, yes, continuous improvement in a governing structure, the NOSB, to protect and oversee the necessary nurturing growth and integrity.

We know the three OFPA criteria for the National List. I urge you to incorporate two additional elements that I believe are, that we are charged with in upholding the law under the NOSB.

Your charge, number one, advancing organic differentiation in the market. I love organic because it is willing to be unique, to express itself, to stand up for what it believes is necessary to solving problems and working through difficult issues and so we appear different in the market.

We find or if we appear different in the market, whether we're found in the frozen food instead of the refrigerated section of the grocery store, we embrace the difference that explains and explain at the point of purchase why we don't used substances like celery powder with carcinogenic

NEAL R. GROSS

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

nitrosamine compounds in the final food product, whether from synthetic nitrogen or naturally derived.

Why we reject GMOs, gene editing, and require a three year transition whether in farmland or in greenhouses.

And number two, supporting and advancing a change in culture. I love that organic has always embraced change in the culture of how we farm, how we treat the earth, how we process food, because it doesn't inherently say we want to use this substance for efficiency reasons even though it doesn't meet one of the 11 categories of allowed materials, OFPA 6517, which doesn't allow growth regulators like fatty alcohols.

Organic must be positioned for exponential growth to confront the environmental crises on the horizon from the climate crisis to insect apocalypse and the dramatic decline in biodiversity. Thank you.

CHAIR BEHAR: Thank you, Jay. Dan?

DR. SEITZ: So Jay, you're often in,

NEAL R. GROSS

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

your organization's often in the position of taking what you might call minority position on some substances.

And I just wanted to get your thinking on a couple things and one is fish oil. And again, I'm asking just from a consumer standpoint.

So one of the arguments is, well, it may not technically meet the criteria for listing but consumers are out there wanting to get omega-3 fortified foods. They can get them conventionally plus we'll bring consumers over to the organic side.

It will help with the success of selling organic products.

So I'm just kind of curious just how you balance those types of arguments when there's not a technical basis for listing a substance?

MR. FELDMAN: Yes. It is a challenge, there's no question. This argument that we can grow the organic industry by making adjustments or compromises with the standards is a slippery slope and it's something you confront as an NOSB Board Member all the time.

NEAL R. GROSS

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

But the key here is to understand it's not the overall organic industry that's being questioned in an issue like fish oil and as indicated in our comments, but it's the fact that we're only as strong as the weakest link.

You know, we may feel like we can't do anything about celery powder or fish oil to the extent that we retain things that are out of compliance, we don't incentivize the alternative, the development of alternative materials.

And that's the hard call as an NOSB member. I think it's the hardest call. How do we hold to the standard and in the process incentivize alternatives that fit into place?

And I, you know, I think this is true with virtually every material that we feel uncomfortable with but we accept as part of the growing of the organic system.

So, you know, again we're only as strong as our weakest link and we have to adhere to the standards we set otherwise we don't have the credibility and the integrity that consumers are

NEAL R. GROSS

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

expecting.

CHAIR BEHAR: Tom?

MR. CHAPMAN: I want to ask a question on how you balance certain human health factors.

So you raised celery powder and, you know, your concerns are linked to carcinogen links to colorectal cancer.

But the alternative in a lot of these meat curing products if you can't use a nitrate product is increased sodium chloride uses, more salt, distinctly more salt.

And the number one cause of death in the U.S. is heart disease. So you're kind of pulling from one human health risk and shoving it into another human health risk, one that's the leading cause of death.

How do you balance that? I mean, it seems like we're just pushing from one end to the other end.

MR. FELDMAN: Well, I think organic, you know, occupies a special place in the market and what we're trying to do with organic is be a

NEAL R. GROSS

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

leader that people invest in in a growth pattern that's exponential.

I agree with the previous speaker that we have to begin to see ourselves as solving these huge environmental problems on the horizon and the only way we're going to do that and expedite this growth exponentially is to have a greater or higher degree of investment.

So in making that tradeoff, we have to be sure that we're not doing something that puts us in a category of the lack of credibility, the lack of trust, that category.

And I don't want to see and you don't either, want to see an article in the Washington Post or the New York Times about nitrosamines in organic food purposely introduced into organic foods.

So you weight that, right, against what do consumers know vis-a-vis the, you know, their own health. Salt, salt in the diet. I mean, salt is a labeling issue. We have low salt foods.

It's a commonly understood adverse

NEAL R. GROSS

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

effect, right, so and depending on preexisting and medical conditions, people are aware and tuned into those labels that are out there.

We don't have, we have a misleading label right now for celery powder because, you know, we're indicating that this thing doesn't contain nitrites but then we have a little asterisk that, you know, that it's celery powder and it's used for curing, you know.

So again, I think one of the things we in organic have to be aware of is that we are dealing with a consumer population that's reading labels, right.

MR. CHAPMAN: Yes.

MR. FELDMAN: So they're reading about salt. If we're not disclosing the impact of the inputs that we're using and the potential residues in the finished food commodity, we're not doing our job.

MR. CHAPMAN: And I agree with you there but that's not an issue before us. That's an FSIS labeling issue and unfortunately we don't advise

NEAL R. GROSS

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

that branch of the USDA.

MR. FELDMAN: Right, but it has to be factored into our decision. I mean, if we're sitting here as a Board and you're making a decision on including a material or not and you know that the labeling will be misrepresentative or fraudulent, I would consider it fraudulent, then you look at that as a factor in the decision as to whether to list or not, say we don't have control over this, it is going to misrepresent the production process, the processing method, and it represents a problem.

CHAIR BEHAR: Thank you.

MR. FELDMAN: Thank you.

CHAIR BEHAR: Next up is Lynn Coody and then Michelle Smolarsky, Amalie Lipstreu, and Bjarne Pedersen, and then we'll take a break.

MS. COODY: Hi, my name is Lynn Coody and I'm presenting comments for the Organic Produce Wholesalers Coalition, six businesses that distribute fresh, organic produce across the United States and internationally.

NEAL R. GROSS

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

In our comments to the NOSB, we express our own ideas and provide a conduit for the voices of the many certified growers who supply our businesses.

Since that review, OPWC urges the Board to relist all the crop materials now up for sunset review.

We have provided information about the use of these materials in growing fruits and vegetables as well as comments from growers about their use of these materials on specific crops.

OPWC also supports the relisting of citric acid, lactic acid, hydrogen peroxide, and peracetic acid, which are important sanitizers for handling produce.

Paper pots, OPWC submitted extensive comments on paper pots. Our central concern about the discussion document is to propose the expansion of the scope of the topic to include all types of paper crop production aids.

We suggest that regulations for crop production aids be decoupled from paper pots at

NEAL R. GROSS

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

this time because, one, paper pots have been in use in the organic produce sector for more than a decade and have become an important component of many growers' production systems.

And two, a February 2018 notification from NOP raised regulatory issues uniquely focused on paper pots which results in the need for formal clarification and resolution of the status of this particular product.

We think that further work on the topic of production aids is critically important prior to imposing any regulations on production aid devices such as the questions posed by the subcommittee that they asked about applying the standards for bioregulation and bio-based content.

OPWC asserts that detailed restrictions such as these are premature because we have not adequately considered the potential implications for such regulation to limit the types of production aids devices now in use on organic farms.

We think that a holistic approach to definition, scope, and categorization of

NEAL R. GROSS

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

production aids would be a necessary first step in thoughtful regulation of these devices.

Potassium hypochlorite. Finally our written comments urge the crop subcommittee to reconsider its proposed annotation for potassium hypochlorite as a cleaner for irrigation equipment.

OPWC has concerns about the clarity of the listing motion for this material because it failed to correct an inaccurate citation to the National List which originated in the petition.

Further, our analysis found that the annotation of the proposed listing motion does not effectively limit the use of the material to cleaning irrigation systems as was the focus of both the petitioner and the review conducted by the subcommittee.

OPWC recognized the importance of irrigation cleaners for effective use of drip irrigation equipment so our comments proposed a revised listing motion designed to resolve both of these issues. Thanks.

CHAIR BEHAR: Emily, and then Steve.

NEAL R. GROSS

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

Steve and then Emily.

VICE CHAIR ELA: So Lynn, on paper pots, so you would prefer that we just deal with paper pots? Don't, I mean, even though most like seed tape and some of these other things that also provide growers a real benefit, and presumably could run into the same issues that paper pots did, we just let that go?

MS. COODY: Well, our written comments were clear that we said that things that were similar to paper pots, very similar such as seed tape, could be included in the annotation.

But I have on my desk a big catalog of horticultural production tools, production aids, and I certainly did not want that to be all wrapped into the same thing.

So things that are very similar like planting production aids could be considered in the same group of listings.

But we, yes, production aids, it's a, we don't even have a good description of it. We don't have a definition, et cetera, so I did not

NEAL R. GROSS

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

want to see that broad of a scope introduced.

VICE CHAIR ELA: So I think it was OTA that submitted comments that, and I think some language. I'd have to look it up again but --

MS. COODY: Yes, ours has the same language.

VICE CHAIR ELA: The same language, yes. And that makes some sense.

MS. COODY: Yes.

VICE CHAIR ELA: So, okay. Thank you on that.

CHAIR BEHAR: I think the language was something like in contact with and decomposing into the soil.

MS. COODY: Yes. We framed it in terms of production aids or products that were intended to degrade in the soil, yes.

CHAIR BEHAR: Emily?

MS. OAKLEY: Thank you for your careful reading of the potassium hypochlorite petition. And I was wondering if you could elaborate on how you think the subcommittee's proposal could be

NEAL R. GROSS

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

written in a way that would align with the petitioner's request for a limited use in irrigation and the subcommittee's intent of limiting it for use in irrigation?

MS. COODY: We did propose a change to the annotation and basically it would be similar to the wording that is used for other, another materials that is just used for irrigation or it's just intended for cleaning irrigation systems and our written comments explained that particular language.

So basically you proposed reiterating a lot of the information that is in the chlorine annotation whereas it should just be the wording that is just for use in cleaning irrigation systems.

It's difficult because the, you have to look at the way that it's listed and anything that's underneath something else is subject to all of the provisions above it.

So yes, it's, for somebody who just looks at the National List, you know, really carefully, you're looking for where it's limited

NEAL R. GROSS

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

to not all the things that it could be used for so I think our written comments really provide the details on that.

CHAIR BEHAR: Thank you.

Ashley, did you have something?

MS. SWAFFER: Yes. Sorry, Lynn. So just on that subject, I think the Crops Committee kind of realized that they might have left out that A in that.

MS. COODY: Yes.

MS. SWAFFER: Are you saying that the way that the motion is written would still be wrong if they added the A?

MS. COODY: Yes. Yes, because --

MS. SWAFFER: It has the Safe Water Drinking Act and all that?

MS. COODY: The way it's written it makes it subject to all of the provisions for chlorine. And what you're trying to do as I understand it by both the petitioner and the subcommittee, are trying to list it only for use in cleaning irrigation systems.

NEAL R. GROSS

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

So the annotation language itself as well as the citation to the National List I believe needs to be changed to clarify and limit it to the intended use of the petitioner and the subcommittee's evaluation, yes.

MS. SWAFFER: Okay. Thank you.

CHAIR BEHAR: So it can be, for instance, in A, the number would be nine, just add it as its own separate item and then make it clear that it's strictly for irrigation only?

MS. COODY: Yes, well, if you look at our written comments, it explains that. Let me get over to it. Sorry, I have to flip through a bunch of pages here.

So we said it should be a subset of chlorine materials and it's analogous to the listing for ozone gas which is, it is used, that is allowed only for cleaning irrigation systems and under ozone gas it says, for use as an irrigation system cleaner only.

And I think that's what you really want to say, not all this stuff about how to use it as

NEAL R. GROSS

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

a chlorine material. If you allow its use as a chlorine material and use that information, it would also be able to be used as a generalized sanitizer in crop systems as well.

CHAIR BEHAR: Okay. I think we will

--

MS. COODY: Yes. I think, yes.

CHAIR BEHAR: -- look at that, yes.

Emily?

MS. OAKLEY: This is for Devon. You don't have to answer now, Devon, but could we discuss this behind the scenes a little bit more?

Thank you.

MS. COODY: Yes. Thank you.

CHAIR BEHAR: Okay. Next up, Michelle Smolarski, Amalie Lipstreu, and Bjarne Pedersen, and then we'll take a break. And we're about an hour behind, gang.

MS. SMOLARSKI: Good morning. My name is Michelle Smolarski. Very impressed with your pronunciation correctly.

I'm here this morning to provide

NEAL R. GROSS

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

comments on behalf of the International Food Additives Council.

IFAC is a global association representing manufacturers and end users of food ingredients, including a number of substances that are permitted in organic foods.

IFAC supports the continued use of dairy cultures in organic food production. We appreciate the handling subcommittee's determination that dairy cultures are covered through the existing listing for microorganisms and agree with the proposal to combine the two listings.

However, to ensure that there is documentation that dairy cultures are in fact covered by the listing for microorganisms and to prevent any confusion, in the future IFAC recommends that language be added to the NOSB's vote affirming that dairy cultures would in fact be covered under microorganisms.

With that said, IFAC strongly supports the Handling Subcommittee's recommendation to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

relist microorganisms at 205.605(a).

Microorganisms including dairy cultures are indispensable in the manufacture of many organic food products such as dairy and beverages.

Further, as microorganisms are of fermentable origin not agricultural origin, they cannot be certified organic under the National Organic Program.

In addition, IFAC supports retaining potassium phosphate at 205.605(b). This remains an essential ingredient in many organic operations, particularly as a pH buffer in dairy products.

Dipotassium phosphate, unlike citrates, provides a strong pH buffering for neutral pH products. Further, dipotassium phosphate increases the nutrient levels of potassium and phosphorus in foods while also keeping sodium levels low which is in line with public health recommendations to reduce sodium intake as well as recommendations to increase potassium intake.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Furthermore, IFAC supports the continued use of sodium acid pyrophosphate which is used as an emulsifying agent in process cheese applications and in canned tuna as an inhibitor of struvite crystal formation.

Sodium acid pyrophosphate is also the only product capable of chemical leavening that is allowed by NOSB and we are not aware of any comparable ingredients that can be substituted for this ingredient.

IFAC also supports the relisting of citric acid due to its broad functionality in organic foods as outlined in our more detailed written comments.

IFAC is not aware of commercially available sources of citric acid derived from organically grown crops that would meet the needs of the organic community.

IFAC also strongly supports the relisting of lactic acid, alginic acid, enzymes, and yeast, on the National List but given the oral comment time restraint we will defer to our written

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

comments for further details in supporting information on those substances.

So thank you for the opportunity to provide comments. So close.

CHAIR BEHAR: Steve?

VICE CHAIR ELA: So I mean, in the dairy culture write up the final paragraph is, while there is widespread support for the use of dairy cultures the Handling Committee believes this listing is now redundant and is covered by the listing for microorganisms. We would suggest that removing dairy cultures from the National List would have no negative impacts since they are already covered under the microorganism listing. Functionally these cultures have continued to be allowed, just not listed under a separate category.

Doesn't that cover your concerns?

MS. SMOLARSKI: Would there be another opportunity to provide additional confirmation of that with --

VICE CHAIR ELA: We'll put it on the cover sheet that goes with it to the program but

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

I felt like that was a fairly clear statement that we see that they would not disappear and that we're not in favor of them disappearing, that they are already covered. So I'm just curious what more can we say?

MS. SMOLARSKI: Yes, I think anything more that you can say would be helpful. I think that is helpful and I'm happy to take your comments back to our membership and see if they can craft some more specific language that they'd like to see. So thank you for that comment and for including that previously.

CHAIR BEHAR: Thank you.

MS. SMOLARSKI: Thank you.

CHAIR BEHAR: Amalie Lipstreu is up next with Bjarne Pedersen on deck.

MS. LIPSTREU: Thank you. My name is Amalie Lipstreu and I'm the policy director for the Ohio Ecological Food and Farm Association.

To the NOSB, your hard work and dedication are truly appreciated. Thank you for your service.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

To the NOP, OEFFA appreciates the professionalism and dedication of your staff. We also strongly encourage that you address the 20 outstanding recommendations of the NOSB as mentioned by our chairwoman during her very thoughtful opening comments.

Organic is at a crossroads and the time to act on recommendations of the Board is now.

We ask that soon after the release of the origin of livestock, strengthening organic enforcement, and National List rule making, the NOP release a list of follow-up actions on previously approved NOSB recommendations as well as requested work agenda items.

OEFFA producers have been anxiously awaiting concrete action to crack down on organic import fraud and we appreciate that there has been an increased focus on this issue, action to crack down on certifiers not upholding the standards and we look forward to finalization of a robust rule to strengthen organic enforcement.

We request that any new authorities

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

required by the NOP to make additional progress on this issue are identified and shared with the organic community now so that we do not add more time to the already incremental process of policy making.

Several NOSB members were present at the National Organic Coalition meeting Tuesday afternoon where an energy infrastructure panel discussed the challenges faced by farmer certifiers and inspectors with the ever growing footprint of the industry.

Thank you for learning more about this issue affecting many producers across the country.

We are disappointed that the will of the National Organic Standards Board is once again being subverted by the USDA.

Despite the request to add this item to the work agenda, the NOP yesterday, after much prodding denied the request stating that this issue is best addressed by community groups.

Are community organizations appropriate to be providing tools to organic

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

certification agencies to determine which items are allowed or prohibited on organic farms or how growers address the issue of bringing in topsoil from an independent contractor?

At a time where record numbers of conventional producers are making the decision to transition to organic and when our country needs a movement away from chemical intensive agriculture more than ever and the public is demanding the benefits of organic, integrity is increasingly in jeopardy.

How many more years must we wait? Anyway, I'll take any questions that you may have.

CHAIR BEHAR: Emily?

MS. OAKLEY: Just a quick comment. Thank you for your articulate comments on the energy infrastructure issue.

MS. LIPSTREU: Thank you.

CHAIR BEHAR: Dave?

MR. MORTENSEN: I wonder if you could briefly summarize how it is that groups like your group and PASA and other local and regional

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

advocates for sustainable agriculture and organic practices can't effectively address the natural gas impacts on farms and marketing of the products grown on those farms?

MS. LIPSTREU: It's a very difficult to address, issue to address for multiple reasons. Certainly issues of jurisdiction, you know, whether there is state or federal jurisdiction complicates the issue.

But I think one of the biggest challenges that we were hoping to address is that, you know, there are some clear tools that can be used by certification agencies, by organic inspectors, to help protect organic certification from, for our farmers.

You know, you heard from James Yoder yesterday who was able to use that tool and even though there were challenges, he was able to keep the certification.

But there are many more producers that we've worked with and that others have worked with who have either been forced or have voluntarily

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

removed their land from organic certification to retransition because they didn't have adequate guidance or tools as this process was unfolding.

So we feel it's really, you know, very important that those tools and that kind of direction is shared widely.

And I would also add that we really hope that those Board members that do continue their service going forward, have as your top priority agenda item to follow up on the work of your peers in advancing these 20 outstanding recommendations and work agenda items.

MR. MORTENSEN: Thanks.

CHAIR BEHAR: Scott?

MR. RICE: Just a quick comment on the energy infrastructure. You know, obviously we were intending on working on that in the CACS and as I shared on, it was many days ago, Monday, you know, we'll still, we had a lot of some stand up conversations with you and others in the community.

I would like to bring those topics to Accredited Certifiers Association. We have an

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

opportunity to do that, both over our listener conversations and more importantly when we're together at our annual training and where the NOP is as well.

So I think there are some good tools out there and I've been glad to hear that they've been effective and I think while we may not get that information on the platform of this environment with NOSB, we can at least address it at the ACA level and hope that that gets out to the audience that we're looking to, so.

MS. LIPSTREU: Well, thank you, Scott.

We really appreciate the work of CACS on this issue and I guess I'd just also say that, you know, I think at the very least there's an opportunity perhaps through the Organic Learning Center to provide some training to certifiers and inspectors on this issue. Thank you.

CHAIR BEHAR: Thank you.

DR. BRADMAN: Harriet, I just have kind of one comment to follow-up on that last interchange.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

You know, perhaps in the absence of an agenda item from NOSB there could be some sort of federal support or USDA support for a conference or some, you know, or the CA, the Certification Association, some sort of kind of town hall or public approach that can integrate.

It seems like there's been a lot of work done by different groups, can integrate that and kind of have a more universal platform and help perhaps build out the platform that the certifiers are developing.

MS. LIPSTREU: Thank you, Asa.

CHAIR BEHAR: Okay. Thank you. Next up, someone who came from very far away, Bjarne Pedersen.

MR. PEDERSEN: Thank you very much.

CHAIR BEHAR: Your name and affiliation, please.

MR. PEDERSEN: Yes. First I'd like just to thank you for the opportunity to speak here and thank you to the Board for all of your work on the petition for virgin paper which I'm going

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

to comment.

I'm a consultant, okay, I'm a consultant working for the Ellepot Company in Denmark making paper pots.

And to Ellepot and to all the customers, biodegradation is the absolute priority in this and that's whether it's a small family business or a larger company.

I've been working at Ellepot now for eight years developing papers also for organic crops and I'm actually happy to say that it seems that we now have the solutions that will work but in the end we need your help on this.

To make these papers, we need three groups of fibers and they all need to be biobased.

That's important.

The first group is the main part of the paper, is all the natural fibers could be wood, flax, hemp, and all the similar fibers.

The second group, or what we choose to call the regenerated cellulose fibers like lyocell and rayon or viscose but these two groups are

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

biodegradable to nature.

The third group are the synthetics and to make sure that they are biodegradable, I believe that the certifiers need to have a certification program and soil biodegradable is the documentation needed and it's not just a single standard certification, it needs to be a full program like TUV Austria has.

The petition also mentioned binders and I think this should be accepted but no more than 15 percent in the product.

With these options for the virgin paper, paper pots will be safe to use for organic crops and this is something that can be made today.

Ellepot has now one product based on the first two groups that I mentioned and this will cover most crops with six to eight weeks propagation time.

And including the third group, Ellepot can also produce paper which will probably cover a much wider groups of crops.

And I think that the discussion on paper

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

is actually important and I think the use of newspaper and recycled paper could use a new review, especially considering the amounts that are allowed compared to the amounts of use by paper pots. So that concludes my comments.

CHAIR BEHAR: Steve, and then Sue.

VICE CHAIR ELA: Thank you for coming.

Obviously the Crops Committee was looking for feedback from your industry and we've heard lots of comments that we don't want to make an annotation that's unachievable.

So how do you, we reference the ANSI standards or proposed referencing the ANSI standards for biodegradability. We might find a different word to use before I start down that.

And you referenced I believe some European standards. Those would be harder for us to reference --

MR. PEDERSEN: Yes.

VICE CHAIR ELA: -- as USDA, but do you have a, would the ANSI standards, would they work for you or are those, would there be something that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

we could easily reference from the NOP that would be different than the ANSI standards?

MR. PEDERSEN: I think that would be the same. I think that the TUV Austria program uses references to both the ISO and the ASTM standards in their program. That's why I recommend a full scale certification scheme because they include a lot of certification schemes.

If you were to look only at any kind of standard looking at salt biodegradability, you would leave out the I think very important issue of toxicity in the soil which is also looked at in the certification scheme.

And I think other issues are important to look at the same time beyond the soil biodegradability.

And I think most of the standards, ISO or ASTM are having a similar build up and I know that one of the test institutes, OWS, supporting all these for TUV Austria also works in the United States.

So I think mentioning perhaps both type

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

of standards relating to each other would be feasible.

CHAIR BEHAR: Have you tried hemp as to replace some of the synthetic, the, you know, the third category that you were talking about?

MR. PEDERSEN: We have tried actually a lot of natural fibers and in the beginning we actually asked two of our paper suppliers, quite large companies, if they knew the difference in biodegradation time on natural fibers and they didn't.

It's not been an issue in the paper business. So we did our own testings and basically most fibers including the hemp fibers are practically gone within three to four weeks and will not hold together any type of paper product.

And that's too short a time period for paper pots because you need to have strength in the paper enough to move the pot after perhaps six to eight weeks and even sometimes more. And after that the paper must weaken and biodegrade but three to four weeks, that's too short time.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

The first product that we developed had that time span but we haven't had actually any customers really succeeding with using this. It degrades too fast.

CHAIR BEHAR: Thank you. Asa?

DR. BRADMAN: This perhaps repeats some earlier information, but you mentioned an Austria standard for biodegradability of the fibers? I think you were referring to the synthetic portion of the paper.

Two questions related to that. One, what percentage is the synthetics and then two, do they really biodegrade?

I feel like in some of the discussion we've had today, we use the word degrade and biodegrade interchangeably and do we really mean biological degradation i.e., it's being consumed as an energy source for microorganisms?

MR. PEDERSEN: TUV Austria is a certification company and then they got different kind of schemes.

They got home compost, biodegradable

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

in the soil, industrial compost. And the scheme for the biodegradable in soil tests in a range of ways of disintegration but also biodegradation.

And the test method for biodegradation is measuring the CO₂ and 90 percent biodegradation is measurable. The last ten percent will be consumed in other organic processes during the biodegradation. And it is biodegradation by microorganisms or whatever is in the soil and therefore it is entering the system of nutrients or whatever.

And the reason for mentioning this scheme is that it has a broader range of looking at the biodegradation.

And I think within this two year period that it works, gives actually a good documentation for the synthetic products that they will be biodegradable in soil because if you choose like biodegradable in home compost, it is a little higher temperature and that would not guarantee that it would work within two years at least in soil.

It may be like ten years. That could

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

be okay but we would like it to be biodegradable in soil because then we know we're on the safe side within two years.

CHAIR BEHAR: I have one last question and that is do you know if that this synthetic polymer that's used in biodegradable mulch, is that also being used in some of the pots, the paper pots, and that's one of the synthetics?

MR. PEDERSEN: Sorry, I think I missed on that one. Could you --

CHAIR BEHAR: There's a polymer that's used in biodegradable mulch or is it one of the synthetic fibers that's also then used in pots? Is it present in somebody's pots?

MR. PEDERSEN: Some of the materials are present but as I understand it, the standards testing document in the biodegradable mulch are the industrial which needs higher temperatures than you would find in the soil and they wouldn't make it for biodegradable in soil standards.

We use some of these industrial compost materials but we do not recommend it for use to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

plant out because that would not disappear in many years' time.

I think that the main certification to focus on would be biodegradable in soil and 90 percent within two years because that would work.

CHAIR BEHAR: Thank you.

MR. PEDERSEN: You're welcome.

CHAIR BEHAR: I think we are done, we're going, for now. We are not done though. So it's going to be a quick break, try to gain back. So it's 10:53. Everybody back by 11:00. I know you won't get back but let's try.

(Whereupon, the above-entitled matter went off the record at 10:54 a.m. and resumed at 11:05 a.m.)

CHAIR BEHAR: Okay. Next up is Dean Jefferson -- I'm sorry, Jefferson Dean. And on deck, David Hiltz. And after that, Mike Croster.

So, is Jefferson Dean in the room? There he is.

MR. DEAN: Hello. My name is Jefferson Dean. I'm an organic grain farmer from North

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Central Ohio.

I currently farm with my son and have been certified organic for 25 years. We farm about 950 acres and I was an organic dairy farmer for 13 years.

I have multiple issues to speak about today. The first being the origin of livestock and grazing rules.

I am disappointed that this is still an issue and disheartened by the negative effects of the slow action and lack of enforcement.

As we speak here today, small organic dairies continue to be forced out by oversupply and low prices brought on by massive operations taking advantage of the gray areas in poor enforcement.

This is not some theory of the future or some worst-case scenario. This is happening right now.

Yet, now we're talking about a new comment period for new producers, but the voices we really need to hear from are those that are of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

the honest, small farmers who couldn't make ends meet, but they're gone.

Next, on the topic of honesty, we, the producers, need to know what we're planning. Genetic contamination of seed corn is a growing issue.

It is not unreasonable to ask for all seed corn to be tested for GMO with the results printed right on the seed tag. There's plenty of room on the tag. It's not a terrible burden. It's not expensive.

Every load of corn that I produce is tested for GE contamination before it can be unloaded. There's no reason that seed companies cannot provide the same testing before we take possession of their product.

Next, I need to make a point about innovation and progress. Farmers are some of the most innovative people in the world when we need to be.

Whether it's new equipment, processes, whatever, things start to change when there's

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

incentive to do so.

However, when the standards are watered down to permit conventional techniques, there's no incentive and, therefore, no innovation.

Additionally, loosening regulations so the farmers can use questionable methods or materials harms the integrity of the USDA organic label.

No matter if it's considered gene editing or pesticide or origin of livestock, loosening regulations beyond the spirit of organic agriculture can have large and negative effects.

Organic farming is voluntary. It's not for everyone. If a farmer can't figure out how to farm within the rules, they can opt out of organic and they can farm conventionally.

I ask you to please consider the founding principles of organic first and foremost in any policy decision we make.

Please keep our standards strong and give our honest, innovative farmers the chance to provide products we're proud of to consumers who

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

are proud to buy them.

CHAIR BEHAR: Emily.

MS. OAKLEY: I heartily agree with everything you've said and thank you for taking the time to come here.

CHAIR BEHAR: Yes, and I agree.

And I would have liked to have had that -- the genetic information on the seed tag, and I'm hoping that, in the future, there will be so many requests by farmers to find that information that they'll just --

MR. DEAN: That's not the way to go about it. We really need to force them to do it. Only half of them will do it.

It's not a big burden on them. They're testing it anyway, you know. They can test it by lot and put it on the seed tag.

There's lots of information on the seed tag already. It's very simple. I don't understand why it's made to be such a big deal.

CHAIR BEHAR: Sue.

MS. BAIRD: I may be wrong because it's

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

been -- my terminology -- 110 years since I was over the Feed and Seed Program in Department of Agriculture in Missouri, but the seed tags are regulated by law.

It may be -- we need to look that up, but it may be actually prohibited for them to add another column to their seed tag, maybe.

MR. DEAN: Well, that's real simple. When you buy a bag of seed corn, there's a regular seed tag that has the germination and everything, and then there's another seed tag with whatever seed treatment is used, then there's another seed tag that has their label and their variety and everything.

Just add another seed tag to it. If that's a problem -- you know, it's not an issue.

MS. BAIRD: Yeah. You absolutely could add another tag, but you could not put it on the seed treatment tag. I do know that.

And I'm pretty positive you can't put it on the nutritional -- the statement for the --

MR. DEAN: There's already three or

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

four tags on the bag anyway. You can just put another one on there.

MS. BAIRD: Perhaps.

MR. DEAN: You know, it's asking a lot for farmers to have to call the seed company, after they already got their seed, and give them the lot number and say, what's the contamination, you know.

I'm ready to plant this and now I find out it's contaminated, you know, to the point where my crop's going to be contaminated. It's going to cost me, you know, a fortune.

What do I -- you know, what do I do then?

MS. BAIRD: I'm very sympathetic. I'm just saying legally we need to look at that.

CHAIR BEHAR: Thank you.

MR. DEAN: Thanks.

CHAIR BEHAR: David Hiltz is up next with Mike Crotser and then Meagan Collins.

MR. HILTZ: Good morning, everyone. My name is David Hiltz. I'm the Director of Regulatory Affairs with Acadian Seaplants. We're a global manufacturer of products derived from

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

marine algae, including Ascophyllum.

We appreciate the NOSB and the NOP's ongoing efforts to study the issues surrounding the use of marine algal materials as inputs into organic agricultural applications, and we thank you for the opportunity to once again comment on this topic.

It was a pleasure yesterday to listen to the four experts on the Marine Materials Panel provide information on this complex issue.

It seems there was good agreement on a number of points beginning with the importance of initial biomass assessments to establish the amount of algae in a given area.

Subsequently, it is important to use a conservative harvest plan with closed areas for ecosystem protection and minimum cutting heights for racks or harvest rotation for kelps to ensure that the algae can recover after harvest and any minor changes to the ecosystem are short-term.

Finally, harvesting activities in seaweed landing should be scientifically based and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

periodically audited by a third party for adherence to the harvest plans that are in place.

As you heard yesterday, many of these suggested conservation efforts are already in place for much of the commercial harvest of *Ascophyllum*.

This species has been shown to be extremely resilient and dynamic. It has evolved to be this way because it needs to survive in the North Atlantic intertidal zone of the coastline.

Daily tidal changes and storm actions have been shown to result in significant removal of biomass, yet *Ascophyllum* rapidly regrows and recovers from these natural losses restoring the habitat to stable levels.

As you have heard, annual harvest rates have been set to be less than the documented annual regrowth rates.

As a result of this conservative approach, we have seen long-term commercial applications of -- commercial harvesting of *Ascophyllum* in many global areas with little documented effects on the health of the resource.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

It is again important to consider the scope of the harvest when suggesting that significant quantities of a species are being removed by commercial harvesting.

In Maine, for example, the entire commercial harvest represents less than two percent of the scientifically estimated coastal stock of *Ascophyllum*.

In European countries such as Iceland, Norway and Scotland, the total harvest is approximately three to four percent of the total coastal biomass estimates.

Now, given that storms and wave actions have been shown to remove 30 to 40 percent of the *Ascophyllum* biomass on an annual basis, it is clear that the scale of the current commercial harvest is actually small.

As discussed yesterday, it is next to impossible to study every possible outcome to demonstrate that any activity shows no possible environmental impact.

However, there are numerous scientific

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

studies that have concluded that the current *Ascophyllum* harvesting practice show no negative impact on either the species itself or some of the associated fauna in the intertidal zone.

We encourage the NOSB and the NOP to carefully evaluate the evidence at hand to determine if there really is an issue with the current commercial harvesting of marine algae for crop inputs. Thank you very much.

CHAIR BEHAR: Emily.

MS. OAKLEY: Thank you for coming and you speak to one species and in one geographic region, but there are a wide number of species and geographic regions that are used in materials. So, I just wanted to state that.

And then I've asked you before and I'm wondering if this is still true, because in public comments a year ago you stated that you would be open to the consideration of organic certification, but your written comments have subsequently expressed more caution for that.

So, I'm wondering if you might like to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

go back a year and reexpress support for organic certification.

MR. HILTZ: So, with regards to your comments, I'll respectively disagree with the first statement.

We are a global company. We harvest in Atlantic Canada, for sure. We also harvest in Maine. We also harvest in Ireland, Scotland and a number of other areas that we're investigating.

So, I would not -- so, I would disagree that we're a regional -- you know, we're giving a regional perspective here.

With regards to your second point, Acadian already has a significant portion of our commercial harvested certified organic for use an animal livestock input.

And as I had said before, it would not be unthinkable, if the rules are reasonable, for us to then extend that certification practice to all of our Ascophyllum harvest regardless of if it's going to livestock or to aquatic plant extract production.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

The challenge there gets back to the last point that I made that we need to have a reasonable approach there where a lot of the science that we have provided and shown suggests that we're not having an environmental impact.

But if there continues to be, you know, a demand to do more science and more science, at what point does that -- whatever rule becomes -- in place become prohibitive to a company obtaining that certification.

So, as long as the rule is reasonable -- like, for example, right now, if it was just a matter of applying the rules that you heard the group from MOFGA say they were applying yesterday, I don't think our company would have a problem with that.

CHAIR BEHAR: Thank you.

MR. HILTZ: Thank you very much.

CHAIR BEHAR: Next up, Mike Croster. Then Meagan Collins and David Suchoff.

I just want to remind people, too, if you have a PowerPoint, get it to Michelle way ahead

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

of time before your time to peak.

Go ahead, Mike.

MR. CROTSEY: Good morning. I'm Michael Crotser, the Certification Manager at CROPP Cooperative.

We appreciate the work at the NOSB and the NOP to support organic agriculture. Thank you for the opportunity to speak today.

My first comment will be about fish oil and gelatin. We support relisting fish oil and gelatin on 205.606.

CROPP Cooperative uses fish oil for our omega-3 supplemented whole and reduced fat milks. Omega-rich products are preferred by a large sector of our customers.

We use 606-listed fish oil because there is no organic source available. Our fish oil is a byproduct of fish meal production.

Utilizing recognized sustainable fishing standards will verify that production maintains or improves aquatic ecosystems.

If fish oil is removed from the list,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

it would result in discontinuation of our products due to a lack of alternatives and this would have a harmful impact on our milk supply.

We also support relisting of gelatin. Gelatin is a functional ingredient in fish oil. The gelatin is sourced from Tilapia byproducts from commercial harvest.

The gelatin's function is to encapsulate the fish oil to reduce the fish smell and ease the handling of the powder product.

Gelatin encapsulation is a unique function when compared to using gelatin for food textures such as gummy bears.

My second comment will be about celery powder. We support relisting celery powder on 205.606.

Over 25 percent of the organic meat company sales are products that contain celery powder.

We use celery powder in a variety of processed meat products. This includes hot dogs, meat sticks, landjager, meat bars, jerky, summer

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

sausage logs, deli hams, deli summer sausage, pepperoni, bacon and spiral hams.

Celery powder provides additional attributes to curing, including maintaining a pink color, providing flavor, suppressing pathogens and lowering the acidity of the finished product.

Removing celery powder from the National List will remove meat products from the organic market.

The Celery Powder Expert Panel convened for the spring meeting and spoke of work to find an organic alternative.

This work will continue with the USDA Organic Research and Extension Initiative Grant.

This \$2 million grant was awarded to Dr. Erin Silva at the University of Wisconsin, Madison, and will focus on developing an organic alternative to conventional celery powder.

At this time, there are no alternatives to celery powder in cured organic meat. Please relist celery powder at this time to prevent disruption of organic commerce.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Thank you for your time to speak today and your support to bring our organic products to market.

CHAIR BEHAR: Tom, and then Dan.

MR. CHAPMAN: We've heard other comments on fish oil -- I have a couple questions, but the first one will be on fish oil.

We've heard a couple comments on fish oil about heavy metal content. Can you speak a bit to how you monitor or control that, the fish oils you procure?

MR. CROTSEY: Yeah. We primarily work with a supplier or a vendor that meets international standards for heavy metal levels and -- in the fish oils, and this is shown on spec sheets for the raw ingredient, the fish oil itself, and finally the powder that we use in our product for the various heavy metals that are disclosed on there.

If the board hasn't seen those spec sheets, I'd be willing to share those with the board.

MR. CHAPMAN: Thank you. And then I

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

have couple celery powder questions.

First, a Jenny-style hypothetical question that she loves, but directed at you, if an organic shopper was, you know, at the meat case in the store and, you know, imagine we had already removed celery powder so we could not be making organic hotdogs, for example, do you think that consumer would opt for a non-GMO hotdog or just not buy a hotdog given the lack of an organic alternative?

MR. CROTSEY: I think there is one section of organic consumers that always chooses organics, but I think hotdogs and some of these cured products are a little bit different.

They're really popular with kids and children and, you know, from my experiences, kids will always eat a hotdog, right? And I think the parents will want to try to accommodate that.

My kids are having a hotdog sale at school. They're buying our organic Prairie hotdogs for that. But I think if that wasn't available, they would still be having a hotdog sale.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. CHAPMAN: Yeah. As a parent of young kids, I just want the kid to eat.

MR. CROTSEY: Yeah.

MR. CHAPMAN: One last question.

I know FSIS, we've heard a lot of questions about that and the labeling of meat products -- processed meat products. It's heavily -- it seems quite heavily regulated and limited in what claims can and can't be made.

I was looking at some labels for your products and I notice you make a statement along the lines of no nitrate or nitrate-added except those naturally occurring in celery powder and sea salt.

So, it seems like, and correct me if I'm wrong, you're trying to disclose the maximum extent allowed by other regulations, the presence of nitrates and nitrites in the celery powder that you use.

Is that a fair statement?

MR. CROTSEY: Yeah, that's the intent of the statement. Our consumers are very savvy

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

on organic products and they're aware of nitrate/nitrite issues. And so, we want to be transparent.

As a crop cooperative, as a marketing organic co-op, we've had a history of being fully transparent on our labels.

We choose to list everything, even processing aids, because that's the right thing to do for our customers and they want to know that information.

MR. CHAPMAN: Thank you. And then hopefully in the future you can help me solve the mystery of being able to find organic hotdog buns, because those seem commercially unavailable for some odd reason.

(Laughter.)

MR. CROTSEY: Yes. Yes.

CHAIR BEHAR: Dan.

DR. SEITZ: So, you mentioned that there's a sizeable market for dairy products fortified with fish oil, and I was just wondering if you had actually any numbers around that in terms

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

of percentage share of the market that chooses those types of products.

MR. CROTSER: Yeah. And I -- for those numbers, I think you could look back to my comments -- the CROPP comments that we made at -- back in Seattle.

We had them in this year's comments, but we were advised maybe not to share those quite so publicly.

But they were in the Seattle comments, so you could reference that to understand the value of the omega-fortified milk products.

CHAIR BEHAR: Thank you.

MR. CROTSER: Thank you.

CHAIR BEHAR: Next up, Meagan Collins. Then David Suchoff and Dain Craver.

MS. COLLINS: Good morning. Thank you for the opportunity to make comments to the NOSB.

My name is Meagan Collins and I am the ACA coordinator with the Accredited Certifiers Association.

We are a nonprofit educational

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

organization and our membership includes 60 certification agencies that are either accredited by the National Organic Program or in the process of accreditation.

First, we would like to comment on the discussion document on paper to the Crop Subcommittee. Thank you for the work the NOSB has done on this.

The ACA supports the ultimate allowance of paper pots as a crop production aid listed at 205.601(o).

We do not support verifying requirements for synthetic polymer fiber content, percentage of biobase and biodegradation.

Determining synthetic polymer content may be difficult, if not impossible, to measure and setting a synthetic polymer content threshold could result in a listing that does not actually allow for any products currently on the market.

This could also lead to inconsistency among certifiers and MROs as some require testing to verify requirements and others only require

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

manufacturers to submit attestations.

While other aids such as seed tape collars and hot caps were considered, the primary focus for certifiers is allowing paper pots specifically.

The intent of a listing for paper pots is that it will allow for paper pots currently on the market which contain glues and synthetic fibers.

Second, we would like to comment on the proposal on the use of vaccines made from excluded methods to the Livestock Subcommittee.

The ACA would like the NOSB to deliberate more on commercial availability and consider any resources to determine equivalency and release those resources, as well as information needed by certifiers to enforce commercial availability requirements.

The apparent lack of resources available to the producer to determine whether an equivalent vaccine is available is a question of concern.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

It may be difficult for producers to determine what other vaccines that prevent the same disease are available and whether they are genetically engineered.

Many organic livestock producers may not have access to modern technologies to aid them in their search. Thus, we request that the subcommittee address these questions: Where can producers inquire about equivalent vaccines and do producers have the resources and technical knowledge to determine what an equivalent vaccine is and if it is produced through excluded methods.

Finally, another potential concern is the placement of the commercial availability clause in section 205.105 instead of on the National List at 205.603.

This could set a precedent for commercial availability for other things listed in this section. Thank you for your time.

CHAIR BEHAR: Ashley.

MS. SWAFFAR: Thanks for your comments.

So, I've asked everybody else and now you're here,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

so do you think that the ACA could be a place to where some of this could be worked out as a group for vaccines, if you didn't think that's what I was asking about, but could the ACA kind of be that resource for the certifiers that have had so many questions about the vaccines?

MS. COLLINS: Yes. I think, you know, we could form, like, a working group and come up with the best practice for that, sure, but I think the questions about, you know, whether producers or even certifiers have the technical knowledge to determine equivalency is still going to be a question.

Like, what resources and documentation would the producer need to supply the certifier? Would it come from a vet, for example.

But, you know, like I said, I think ACA, as long as we're given -- provided those resources -- I know Harriet had mentioned earlier about poultry vaccines and only two are genetically engineered.

And so, we'd like to know where that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

information came from and if you -- if the NOSB can provide any of that information.

CHAIR BEHAR: We will do that.

MS. COLLINS: I'm sorry?

CHAIR BEHAR: It's actually in the proposal.

MS. COLLINS: It's in the proposal. Okay.

CHAIR BEHAR: Yes.

MS. COLLINS: Was that through the USDA APHIS?

CHAIR BEHAR: Uh-huh.

MS. COLLINS: Okay.

CHAIR BEHAR: Okay. Good. Thank you.

MS. COLLINS: Thank you.

CHAIR BEHAR: Next up is David Suchoff, then Dain Craver. And after that, Brian Shevrin.

MR. SUCHOFF: Hi. Well, good morning.

My name is David Suchoff. I am the assistant professor of organic production systems at North Carolina State University and I'm here to talk about the fatty alcohols used in organic tobacco.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Now, to give you all just a little bit of background, we've been seeing an increase in sales of organic goods in our state since about 2011.

In fact, in 2016, for the first time ever, we became one of the top ten states in the nation in terms of overall sales of organic goods.

In that year, we generated around \$145 million. And when you break it down, there are three key players; eggs, tobacco, and sweet potatoes. Those three accounted for 80 percent of the sales within that year.

We've also seen a similar increase in the amount of certified organic acreage. And more importantly, we've emerged as a leader in the southeast with regards to sales and production of organic goods.

And this is something we, as North Carolinians, are extremely proud of, but it's also something that we at the university are really trying to support as much as possible.

For example, my position at the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

university is a newly developed position that was created specifically with the intent of keeping this upward movement going.

Now, let me be clear. The growth in organic agriculture has been on the back of organic tobacco.

This crop still affords our growers a decent profit margin that can allow them to weather some of the fluctuations or even losses associated with many of our other organic commodity crops.

And I'm here today because I'm extremely worried about what the loss of this product will do not just to the tobacco production, but to organic agriculture in our state.

I've spoken with a lot of farmers, and you all have heard from many of them, too, and what they say is that without this product they can't grow tobacco organically.

And it's not a matter of just finding another crop to fill that void, it's that they can't maintain their certification.

And so, we're going to see a huge step

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

backwards in terms of sales, but, more importantly, in the amount of land that is certified organic.

And this is coming at a time when we finally have momentum in our state where we have a lot more sustainable practices that are really flourishing.

Now, we at the university have done a lot of research looking at alternatives, and what we have found is that there is nothing out there that is effective or economical or safe for our farmers to utilize.

And so, I'm here today to ask that you please allow for this product to be used in organic tobacco.

I think it's important that we go back to the foundations of organic agriculture, this idea of systems or a holistic approach to agricultural production, and in North Carolina tobacco is an integral part of the organic production system.

And so, with the loss of this product, it's not just going to affect tobacco in a vacuum,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

but it's going to have deeply and negatively -- profoundly negative effects on organic agriculture in our state. Thank you.

CHAIR BEHAR: Thank you. I think we might have used up all our questions.

(Laughter.)

MR. SUCHOFF: Okay. Thank you.

CHAIR BEHAR: Okay. Next up is Dain Craver. And then Brian Shevrin and Emily Musgrave on deck.

MR. CRAVER: Okay. Good morning. I appreciate everything you guys do as a board. I know it's a lot of hard work and I'm just glad that you guys can come together and figure things out for all of us growers.

I am an organic apple grower from Washington State and I've been an organic grower for 27 years.

I also consult to help growers go from conventional to organic, and there are three products that I wanted to touch base on as they come up for the sunset review.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

The first one is hydrogen peroxide. We use that in our orchards. Mostly when we had our antibiotics taken away for fire blight, the disease started spreading more and more.

And what we use with this product is when -- the ways that we manage it are to go out and physically remove the fire blight infected off the tree. And so, in order to do that, we take loppers and we cut behind the infection.

Well, we could end up spreading the disease really bad if we don't disinfect our loppers after each cut. So, it's important for us to keep a clean set of loppers so that we can go in and not spread the disease more.

We also use it in operations where we have joint conventional and organic when we need to clean our picking bags after we've picked some kind of a conventional piece of fruit. It's important and it helps us with our washing and cleansing of the bags.

Horticultural oil is really the backbone of most organic growers. It's got so many

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

uses in it.

I'll just break down a couple of them real quick. We use it to begin the season when we spray our trees in the dormant phase.

And what it does, is it will smother the eggs and it will kill the eggs of mites, leaf hoppers, any -- and which mites are pretty bad, so it pretty much takes all those out.

And then, also, we use it to help control pear psylla. It helps pretty much on that. It's about the only thing that we really have and it's also a -- we don't have apple scab, but I understand it's used in the apple scab-growing areas also.

The third one is the pheromones. I spoke last spring about the pheromones. I'm really passionate about it.

I did the first original work back in Washington State in the late '80s with Dr. Jay Brunner.

And what we found, it was just a great way to go ahead and use it for protection for leaf rollers and for coddling moth.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

What it does, is it confuses the moths and they won't be able to mate. Without this, the only really thing we have is a virus, which is CYD-X, and we're starting to see some breakdown of the virus that it's not holding up.

So, with that in mind, those three products, I really feel we need to keep those in the orchard situation so that we can keep growing wonderful organic fruit. Thanks.

CHAIR BEHAR: No questions. Thank you. Thank you for coming from however far away you came.

MR. CRAVER: Washington.

CHAIR BEHAR: That is a long way. Take a butterfly. Ride the wings of the butterfly home.

Okay. So, next up we have Brian Shevrin. After that, Emily Musgrave and Pat Kerrigan.

MR. SHEVRIN: Good morning. My name is Brian Shevrin. I am a certification specialist from Vermont Organic Farmers.

We're an accredited certifying agency

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

up in Vermont, of course, representing over 800 certified organic producers.

We'd like to extend our gratitude to the NOP for extending the allowance of paper pots for use on organic farms, and to thank the Crop Subcommittee for submitting a discussion document in a timely manner.

It's clear the paper pot transplanting system saves time and labor for small, organic vegetable producers, and that not being able to use this system would have an immediate negative effect on these organic farmers.

We're also thankful for the July 2019 technical report on paper pots and containers. In our reading, this document confirms some important points about the synthetic additives and fibers included in the production of these pots.

These points from the technical report are as follows: PVA, PVAC, EVA and magnesium chloride, which are synthetic fibers used in paper pots, are allowed on EPA list 4B as inerts and pesticides already approved for use on organic

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

farms.

Recycled paper products generally have a higher contaminate content than virgin papers, inks, dyes and other chemicals not applied to virgin paper will still be present in recycled paper with the highest grades of recycled paper being the ones that are free of impurities and contaminants.

Even when natural fibers are used, many of these will use various synthetic additives as binders, linking agents, et cetera.

Most, if not all, paper pots that are now commercially available use artificial fibers, as we have discussed.

Two specific ones mentioned are PVA and PLA. Both polymers have been considered by the NOSB in previous petitions both for the reviews on newspaper and recycled paper and as part of biodegradable plastic mulch.

In other words, all the synthetic fibers that are in use have been considered by technical reviews already.

So, based on this important information

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

from the technical report, we strongly urge the NOSB to expand the allowance of paper products on the National List by including the following language: Virgin or recycled paper without any colored or glossy inks.

We do not recommend that any restrictions be placed on the synthetic polymer content, biodegradability or biobase content.

It is important that we solve this issue in a simple way, which is to expand the already accepted allowance of recycled paper as mulch and compost feed stock to include virgin paper and to expand its use in paper pots and all paper production aids.

Additionally, with my last little bit of time, I'd like to really reiterate and echo the comments from ACA'S representative earlier on the hemp clones and the clarification needed.

We're seeing a huge growth in the hemp industry in Vermont and, like the representative from ACA mentioned, we feel required by the letter of the law to allow for hemp clones even though

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

it really exists in a gray area that we don't feel we should or we don't really want to allow. So, some clarification on that would be much appreciated.

CHAIR BEHAR: Steve.

VICE CHAIR ELA: Some questions.

So, given, you know, the annotation you apply for paper pods --

MR. SHEVRIN: Uh-huh.

VICE CHAIR ELA: -- but it would mean, you know, for what is currently there, but new manufacturers can come in and do something different.

So, how do we limit what they can do?

MR. SHEVRIN: That is a great question.

I don't have a background in materials review or paper composition.

I thought the representative who spoke earlier who is involved in the paper industry made some great points about the actual requirements that they are working with for what -- you know, what is needed for the functionality of the paper

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

pot in that four to six-week window and the three different kinds of fibers that are involved.

So, I think some continued interaction with the paper manufacturers about whether they do want to include new synthetic fibers is needed so we're not just assuming that they're going to be, you know, throwing any kind of synthetic fiber in there.

So, open dialog would be my suggestion.

CHAIR BEHAR: Dave.

MR. MORTENSEN: Yeah. Just quickly, Brian, I wanted to thank you for the deep dive on the composition of some of these other materials.

And the paper, that's actually one of the first times I realized that those things are registered. So, thank you. I was not clear on that before.

CHAIR BEHAR: Okay. Thank you.

MR. SHEVRIN: Thank you so much.

CHAIR BEHAR: Next up, Emily Musgrave. Then Pat Kerrigan and Diane Wilson.

MS. MUSGRAVE: Good morning. My name

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

is Emily Musgrave. I'm the organic program manager at Driscoll's.

I would like to thank the NOSB for their unwavering efforts to uphold the regulatory processes of the National Organic Program.

My comments today focus on the continued allowance of the following materials for use in crop production, hydrogen peroxide, horticultural oils, pheromones, ferric phosphate, potassium bicarbonate and magnesium sulfate.

Additionally, Driscoll's supports the continued listing of the following products for handlers: citric acid, hydrogen peroxide, and peracetic acid, as these are all important sanitizers for organic facilities.

Driscoll's supports the continued listing of hydrogen peroxide for use in organic production on the National List.

Hydrogen peroxide is widely used by Driscoll's organic growers for cleaning irrigation lines and is essential for drip line maintenance.

Driscoll's supports the continued

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

listing of horticultural oils and pheromones for us in organic production as they are both critical tools for the organic industry as a whole.

Horticultural oils are an integral part of the IPM strategy as they kill fungal pathogens.

Driscoll's supports the continued listing of ferric phosphate in organic production.

The vast majority of our growers use ferric phosphate as slug and snail damage is prevalent among berries.

Driscoll's supports the continued listing of potassium bicarbonate in organic production.

Potassium bicarbonate is an extremely important tool for controlling powdery mildew in strawberries.

Potassium bicarbonate is also a key input for the production of organic strawberry crowns at the new shoot level.

It would be prohibitive to produce organic planting stock in strawberries without this

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

material.

Finally, Driscoll's supports the continued listing of magnesium sulfate as an approved material on the National List.

Magnesium fertilization is critical to plant health across all berry types although raspberries, in particular, are heavy magnesium feeders.

In the 2019 spring NOSB meeting, the board asked about the use of dolomite as a suitable alternative to magnesium sulfate.

Dolomite is not a suitable alternative to magnesium sulfate because it raises the alkalinity of the soils.

This is a problem because the majority of growers already have alkaline soils and water.

this creates another issue because you would need to increase your acidification inputs.

We are reiterating what many growers and public commenters told the board at the spring meeting that dolomite is not a suitable alternative to this material and magnesium sulfate should

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

continue to be relisted as a tool for organic growers across the industry.

I would like to thank the National Organic Standards Board and the NOP for this opportunity to comment today and for your consideration.

CHAIR BEHAR: Thank you.

Next up, Pat Kerrigan. Diane Wilson and Margaret Scoles on deck.

MR. KERRIGAN: Good morning. I'm Pat Kerrigan with the Organic Consumers Association.

Family farm organic dairies are in crisis. Unfair and inconsistent interpretation by certifiers of existing standards has led to what OCA refers to as cow flipping, driving milk production up and organic milk prices down.

This is resulting in the continued loss for organic dairy family farms, the further erosion of their communities and the continued loss of consumer confidence in the integrity of organic milk and in the USDA organic seal.

While conscientious organic farmers are

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

following prescribed production practices, huge factory farm dairy operations are exploiting onetime conventional dairy transition allowance to realize lower productions costs and reduce competition from real organic dairy farmers that have gone out of business.

The fact that the original origin of livestock rule was allowed to wither on the vine and that it took Senate Agriculture Appropriations Committee legislation to finally force the USDA to take action is an appalling embarrassment for the entire organic community.

The time has long passed for clear and fair regulations. Organic dairy farmers cannot wait for a second origin of livestock proposed rule and desperately need a final rule to be passed by the end of this year. OCA received 15,733 petition signatures on this.

Celery powder's use as a preservative in organic process needs to be prohibited in organic because of known health effects including increased risks of colorectal, stomach and breast cancers

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

and other known health dangers.

The U.N. FAO's international agency for the research on cancer has classified nitrate-treated processed meats as a known carcinogen.

Beyond pesticides, it simply states the use of conventional celery powder with amped-up applications of synthetic nitrogen fertilizer creates the same function and biological impacts as synthetic nitrates/nitrites as a meat preservative.

Organic celery powder does not have high enough nitrate levels to kill bacteria resulting in the use of conventional celery powder and a labeling asterisk following the uncured and/or known nitrate labeling claim.

As Patty Lovera stated at Tuesday's NOC meeting, any time we add a disclaimer, we weaken organic.

This deception allows consumers' trust in USDA -- undermines consumers' trust in the USDA organic seal and further erodes organic integrity.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

OCA has received 12,249 petition signatures and I know that Organic Eye has 3200 signers onto their petition.

Regarding the proposed discussion of allowing GMOs into organic, OCA organic consumers are adamant that genetic engineering in all of its manifestations, old and new, continue to be prohibited in organic.

Keep the doors shut and locked. We received 27,940 signatures on this issue. Thanks for your time and that you all for your service.

Any questions?

CHAIR BEHAR: No. Thank you, Pat.

MR. KERRIGAN: Yeah. Thank you, Harriet.

CHAIR BEHAR: Next up, Diane Wilson. Margaret Scoles, Mike Dill on deck. Go ahead, Diane.

MS. WILSON: Can you see me?

(Laughter.)

MS. WILSON: Well, good morning and thank you for the opportunity to briefly review

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

the area of nutrients, vitamins, minerals on the allowed list of synthetics at 205.605.

I am Diane Wilson, the registered dietician and director of nutrition services for Nature's One.

Nature's One is the pioneer in pediatric enteral nutrition category and we introduced the first organic formula in 1999.

So, what is enteral nutrition? Some of you have heard us previously introduce this topic at other meetings, but it's worth looking at what exactly is enteral nutrition as defined by healthcare professionals.

It's nourishment through the gastrointestinal tract either orally or by tube feeding, either a tube through the nose or through the stomach, and it usually is used as complete feeding.

These are for children, adolescents, adults, senior citizens like myself, who are unable to eat regular foods and have to use enteral nutritional support. There are over 300 medical

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

conditions requiring enteral nutrition support.

The next slide shows that the Food and Drug Administration does not have a standard of identity nor regulations pertaining to enteral nutrition products.

However, the Centers for Medicare and Medicaid Services clearly recognize the importance of enteral nutrition formulas providing complete nutrition.

This federal agency assigns what's called a healthcare common procedure coding system, HCPCS, known as "hic-pics."

And within the HCPCS area, which also includes medicines, medical devices, surgical procedures, anything medical that would be covered by Medicaid or Medicare, they have a special section called B-Codes. B, as in baby.

The B-Codes are for complete enteral nutrition products. For example, B4150 is a valid 2019 HCPCS code for enteral formula defined as conditionally complete with intact nutrients, including proteins, fats, carbohydrates, vitamins

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

and minerals, and must be included enterally -- or be fed enterally.

It also should be noted that if we don't have vitamins and minerals that are allowed in synthetic formulas, we will not have organic enteral formulas available to anyone.

So, the technical report also that was done in 2015 on the vitamins and minerals is not really complete and excludes several key nutrients.

So, I would encourage you to look at what really is being used in enteral nutrition formulas as a source of vitamins and minerals and that would be very helpful also.

CHAIR BEHAR: Tom.

MR. CHAPMAN: Can you speak to some of the challenges of formulating enteral formulas?

MS. WILSON: The challenges are to make sure that you have the appropriate level based on age of the person and the medical condition.

So, it involves looking at the caloric content and making sure there's a balance of proteins, fats and carbohydrates, and the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

appropriate levels of each based on age and stage of development.

Same thing with vitamins and minerals.

For vitamins and minerals, we often have to use a combination, for example, of sodium selenate to get the selenite mineral into the formula, and also sodium chloride.

So, it's a mixture of a variety of nutrients that need to be placed into the formula.

In addition to that, there may be -- another example would be iodine, you know. We might need a couple of different types of ingredients in order to get the iodine levels to the form that they are.

So, it's a complex process and has to be, obviously, meeting label claims. And so, the vitamins and minerals are absolutely a critical part of the process.

CHAIR BEHAR: Rick.

MR. GREENWOOD: Just another quick question.

Is it sold as a sterile product because

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

of the condition of some of these infants?

MS. WILSON: Powdered products are not sterile products, so the -- they are pasteurized, but they're not sterilized.

So, there are special precautions that have been developed by the American Society for Parenteral and Enteral Nutrition that specifically give you guidelines for how to handle a powdered enteral formula when feeding someone who is tube fed.

MR. GREENWOOD: Okay. Again, how do you pasteurize a powdered product?

MS. WILSON: If it's a dairy-based product, then the nonfat dried milk is pasteurized --

MR. GREENWOOD: Okay.

MS. WILSON: -- if it's dairy-based.

MR. GREENWOOD: Okay. But how about the other ingredients?

MS. WILSON: It would be the same thing. They all go through the same heating process.

MR. GREENWOOD: Okay. Thank you.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

CHAIR BEHAR: Thank you.

Margaret Scoles is next, then Mike Dill and Sandy Mays.

MS. SCOLES: Margaret Scoles, executive director, International Organic Inspectors Association.

Members of the board, thank you for your good work. We've already submitted written comments to you thanks to our brand-new IOIA policy committee which significantly expands our capacity to engage with this process. I won't repeat those comments.

I came to speak about something else altogether, a general comment to the CAC and to add the voice of inspectors.

I ask you to consider this: Every time you recommend a change to the regulations, even if it's small, such as verifying that producers try to get non-GMO vaccines when there aren't any, understand that those details roll downhill and end up in the lap of the inspector.

Inspectors have to verify one more thing

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

with the expectation that inspections won't take longer. That may be at the expense of big things that matter more.

I started inspecting 31 years ago before there was an NOP regulation, before OFPA and before IOIA.

Inspector training was not well-developed and inspection reports were one to two pages long, but we generally did rigorous audits, in/out balances and trace facts.

As we started inspector training, our first IOIA training was in 1993, we developed inspector training based on common best practices, we taught them that a minimum of three audit tests should be conducted.

The regulation, perhaps surprisingly, doesn't directly require in/out balances. This remains an opportunity for improvement.

The only reference inspectors can cite when they encounter problems in their in/out balances is 205.103(b)(2), which says records must be sufficient in detail as to be readily understood

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

and audited.

I am encouraged by how Dr. Tucker describes the proposed rule to be coming with more focus on audits.

We have been sitting on a ticking time bomb for years. We just didn't know the name of it until it exploded, Randy Constant.

This is a failure on all of our heads. Our system of managing organic integrity proved inadequate.

IOIA training is available for in/out balances in all three scopes, but training alone is not enough. We need regulatory change.

We, as a certification community, have reduced a critical element of inspection to the lowest common denominator.

In most cases, inspectors perform only one of each; one in/out mass balance and one trace back, no matter whether there's one product or a hundred and these audits may be flawed.

At the NOSB meeting 18 months ago, all of us were focused on stopping fraudulent imports.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

At the same time, the largest domestic fraud in the country had just happened.

We've had a time bomb go among us and the fallout is not done falling. Inspectors today take about the same amount of time as they did 31 years ago, but inspectors are --

CHAIR BEHAR: Finish your sentence.

MS. SCOLES: Thank you -- expected to address incredibly more details in that time if we're going to do serious audits and be time effective.

Please consider this as you fine tune the standards.

CHAIR BEHAR: Margaret, I just want to make a point that the change in the vaccines was to try to make it more consistent between certifiers.

So, for independent inspectors who inspect, let's say, for months and also maybe another certifier who doesn't even check, it's a little confusing even for the inspectors to try to figure out should they be allowing GMO vaccines

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

or not.

And so, we were just trying to make that consistent in implementation because --

MS. SCOLES: And as you know, we actually spoke in favor of it.

CHAIR BEHAR: So, we're not trying to make it harder. I think I'm hoping that it will make it even a little bit easier because each inspection will be covering the same information. Thank you.

Next up, Mike Dill, Sandy Mays and Jill Smith, in that order. Hello, Mike.

MR. DILL: Hello. Good morning. My name is Mike Dill and I'm the food safety and compliance manager for Organically Grown Company, a wholesaler and distributor of organic fresh produce.

This year, we are celebrating our 22nd year of being a certified organic handler. We're pretty proud of that.

So, along with working for OGC, I'm also the coordinator for OPWC, the Organic Produce

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Wholesalers Coalition, where I get to work with and learn from the recipient of this year's OTA Leadership Award for Growing Organic Community, the wonderful and amazing Lynn Coody.

(Applause.)

MR. DILL: Congrats again, Lynn. We all owe you deeply for your contributions to the organic community.

Today, I'm going to keep my comments brief and give a couple minutes back to the agenda, but I felt it was important to thank the Handling Subcommittee and the rest of the board, of course, for all you've done in the past several years.

We've had some very heavy topics that required a lot of careful consideration and thought, which will ultimately have a positive impact.

I'm referring most notably to the work on fraud prevention, supply chain integrity, that has kind of led to the enforcement rulemaking that we're anxiously awaiting.

So, as stated in our written comments,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

we support the subcommittee's recommendations to relist citric acid, lactic acid, hydrogen peroxide and peracetic acid.

All four of these materials play an important role in keeping our food safe. Without them, and a few other materials used for food safety and sanitation, it would not be possible to provide customers and consumers with the safe food they demand and that the FDA requires of us.

Lastly, we want to thank the Board for taking a step back from last meeting's proposed comprehensive review of sanitizers for the reasons we shared in Seattle.

We appreciate this new approach and we are eager to learn more about alternative sanitizers that are safe for humans and are eco-friendly, but not so eco-friendly that they allow pathogenic organisms to survive.

CHAIR BEHAR: Okay. Any questions for Mike?

Thank you, Mike.

Next is Sandy Mays, then Jill Smith and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Robin Hadlock Seeley.

MS. MAYS: Good morning. I'm Sandy Mays, partner and certification specialist at Wolf DiMatteo & Associates.

For the past 15 years or so I've been fortunate to observe the harvest of *Ascophyllum nodosum* in the Breidafjordur of Iceland.

It's a protected area located on the northwest coast, a large, shallow bay about 31 miles wide, 77 miles long.

It's a natural nursery for commercial fishes and crustaceans, which are major industries in Iceland.

If the harvest of Asco was doing any damage to the Breidafjordur, it would also be doing damage to these other industries.

There's no documentation of such damage. The Icelandic government, NGOs and commercial entities work to assess and protect this valuable resource.

The estimated Asco biomass of the fjord is anywhere from 1.2 to 1.8 million wet metric tons.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Thorverk, a certified organic wild harvest and processor operation, holds a government license to harvest only 20,000 wet metric tons annually.

Based on the estimated biomass, they're harvesting around 1 to 1.5 percent of the total biomass.

This small percent of harvest doesn't even equal the amount of die-off of Asco plants or mother nature's destruction of the crop during the winter season.

Thorverk has been sustainably harvesting Asco for over 40 years and follows a rotational harvest program.

In the cold waters of the fjord, we found that Asco can be harvested every four years; however, this is rarely done. Okay.

Harvesting may be done in the same area, but not in the same beds. This would be a waste of time and money.

Some information I found that could be of interest to you, which was taken from an abstract

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

published in World Agriculture in 2010, it says the global seaweed processing industry is estimated to utilize some 10 to 12 million tons of seaweeds annually sourced from wild harvest or cultivated in onshore and offshore farms.

Wild harvest of seaweeds only accounted for about 4.5 percent of the total seaweed production in 2010.

While the cultivated seaweed production has grown by about 50 percent in the last 10 years, seaweeds harvested from the wild have declined significantly from about 1.2 million tons in 2000 to about 0.9 million tons in 2010 and it's going down.

Imagine the harvesting of organic seaweed is so minute compared to what's harvested conventionally.

We at WD&A are hesitant to support the requirement that all marine algae used in organic production be certified organic and offer a simple solution: Require using organic when commercially available.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

This would address concerns about phasing periods to find sources of certified organic marine materials, change types of inputs used or having an adequate supply of certified organic aquatic products to meet the needs of organic crop production. Thank you very much.

CHAIR BEHAR: Emily.

MS. OAKLEY: I have always been intrigued by the example of applying commercial availability across all areas, but in the case of seaweed, how would that work?

If I were a farmer and that rule were applied, how would I know that the seaweed species that I was looking for was organically available by one company and not another?

What kind of search process would be realistic or feasible for someone in my shoes to go through?

MS. MAYS: That's a good question, but it's like -- if I'm not mistaken about what your question is, it's like what everyone else would do while they were searching for an organic

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

ingredient that's not commercially available.

They would contact several different companies requesting organic seaweeds. And if they don't have them, they would use the commercially available conventional product.

CHAIR BEHAR: Steve.

VICE CHAIR ELA: That makes sense for

--

MS. MAYS: I like that smile.

(Laughter.)

VICE CHAIR ELA: Well, I'm just thinking through. I mean, it makes sense for seeds and, I mean, you know, we have that requirement for certain inputs.

MS. MAYS: Uh-huh.

VICE CHAIR ELA: But as farmers for agricultural inputs, fertilizers and a lot of these things, we're not required to do that. So, it's not quite analogous.

You call up your distributor, you get a product and, you know, while we would like to use certified organic products, they're really --

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

it's not part of that system of ag inputs.

So, I agree with what you're saying, but it really is a different -- it really is different.

MS. MAYS: Really is different. Hm, I don't know how to answer that. I'm sorry, but if I do come up with an explanation or --

CHAIR BEHAR: Okay. Emily, short.

MS. OAKLEY: Just a really quick, easy way would be to require that all seaweed is --

(Laughter.)

MS. MAYS: I don't think there would be enough available. I really don't think there would be enough available unless we have a lot more seaweed harvesters manufacturing organic seaweed, you know.

MS. OAKLEY: Well, I think, you know, the people that we've heard from both on the webinar and the public comment, the majority of their harvested seaweed is certified organic for livestock use.

MS. MAYS: Uh-huh.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. OAKLEY: So, it's a smaller portion that isn't certified organic for crop fertility input uses.

MS. MAYS: Yeah. Okay.

CHAIR BEHAR: Thank you.

MS. MAYS: Thank you.

CHAIR BEHAR: Okay. Next up, Jill Smith and Robin Hadlock Seeley and then Harry Rice.

MS. SMITH: All right. Good afternoon, everybody. I guess we passed the morning mark.

I'm Jill Smith representing the Western Organic Dairy Producers Alliance and I'm also an organic dairy producer myself in the state of Washington.

I'd first like to thank you all for your work on the origin of livestock, we're glad to see progress on that, and also for the opportunity to comment today.

WODPA strongly represents --- or excuse me, strongly supports the proposed rule on origin of livestock and urges for an immediate publishing

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

of a final rule to take effect immediately.

We must close the loopholes that are distorting our markets and jeopardizing the livelihoods of organic dairies.

The current rule has left us trying to compete with those who use loopholes as standard practices in their dairy operations, leaving our members suffering from a disparity in their production costs.

We've seen a major influx of livestock transition to organic and have been in a milk oversupply situation with extremely depressed milk prices.

We're seeing lost milk contracts and a rapid loss of dairies while we're in this unsustainable position.

We have producers losing money on every pound of milk that they produce, and those who are hanging on are questioning their future in organic dairy if we don't bring about change.

Along with this rule we must also ensure pasture rules are adhered to and enforced without

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

exception.

We need uniform enforcement from certifying agencies to ensure this critical piece of organic dairy is meeting the highest standards.

Our consumers trust that their milk comes from cows who graze on pastures. The credibility of all organic milk comes into question if the grazing standards are not being met.

Continued training is needed to know certifiers truly understand dry matter intake methodologies and can recognize effective pasture plans. This is imperative for the uniform enforcement of the pasture guidelines.

We view vaccines as a vital part of our health plans and make our choices based on efficacy with disease prevention being a guiding principle.

Without encouraging the use of GMO vaccines, we realize the need does exist for some of them; however, we cannot put additional burden on producers to determine how vaccines are made, nor can we put this burden on our certifiers.

Vaccines can be difficult and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

time-consuming to navigate, especially with adding layers to the current regulations.

We support further clarification on vaccines for producers and certifiers while avoiding the creation of barriers to this preventative component of our health plans.

Our vaccine options must be readily available with a clarified list that is swiftly updated to meet producers' needs.

As we look at synthetic substances allowed for use in livestock production, WODPA recommended the relisting of these products and sees each of them as being essential to organic livestock production. I'd be happy to answer any questions on those substances.

At the heart of everything we're discussing is organic integrity. We must not jeopardize consumer trust in the organic seal; however, we risk doing this without clarification of rules and proven consistent enforcement.

Thank you again for your work and the opportunity to comment today.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

CHAIR BEHAR: Thank you.

MS. SMITH: Thank you.

CHAIR BEHAR: Ashley.

MS. SWAFFAR: Sorry. I actually want to ask a question about iodine.

MS. SMITH: Sure.

MS. SWAFFAR: We hear from a lot of folks that we should annotate that for no NPEs.

Do you think there would be a sufficient supply that you could still use iodine if it is annotated?

MS. SMITH: You know, quite honestly, as a diary producer myself, we have not run into any issues with finding iodine without NPEs.

And I think it's definitely become more of an industry standard for that to be the case, so we have not run into any issue with sourcing that product ---

MS. SWAFFAR: Thank you.

MS. SMITH: -- for teat dip.

CHAIR BEHAR: Dan.

DR. SEITZ: The U.S. Secretary of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Agriculture had stated that, in America, the big get bigger and the small go out.

I don't think, in America, we --- for any small business we have a guaranteed income or guaranteed probability and I'm just wondering if these rules were enforced for pasture dry matter intake, if the origin of livestock rule was promulgated, do you think that small dairies could compete?

MS. SMITH: I think they can be more competitive than they are. We have other issues within the organic dairy industry that do limit possibly the success of some of the smaller dairies as we have very few processors to market our milk to, for one, and they're looking for efficiencies in their hauling of milk, you know.

There are still problems that are going to exist with small producers. And I think that is the same in any industry, you know, as we continue to look for efficiencies.

So, I do think this will make them more competitive and I think, you know, it also keeps

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

these people who really built consumer trust in organic dairy products, it keeps them in this market and they represent organic dairy like nobody else can.

So, we are giving them more power if we clarify these rules and get rid of these loopholes and try to create that level playing field that we talk about.

CHAIR BEHAR: Thank you.

MS. SMITH: Great. Thank you, guys.

CHAIR BEHAR: Okay. Next up is Robin Hadlock Seeley, Harry Rice and Ernie Peterson out there in the audience, they are coming up.

DR. HADLOCK SEELEY: Good morning and

CHAIR BEHAR: Hold on one second. I think we are working on a PowerPoint. Okay. So, we're going to go until 12:30, see how far we catch up, and then we will have a shorter lunch.

So, next up --- let's just change the page here --- Harry Rice and then we'll go back to Robin. Go ahead, Harry.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. RICE: Thank you. My name is Harry Rice and I am with the Global Organization for EPA and DHA Omega-3s, or GOED for short.

We represent 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 and to ensure that our members produce quality products that consumers can trust.

GOED appreciates the work of the NOSB Handling Subcommittee in reviewing fish oil this year as part of the 2021 National List sunset review, and we support the Handling Subcommittee's recommendation that fish oil be retained on the National List.

Consumers who prefer organic products should have access to products made with nonorganically produced fish oil, since organic fish oil does not currently exist, and won't exist until such time that the National Organic Program

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

adopts production standards for aquaculture.

I'd like to touch on three areas very quickly. Number one, contaminants. In the U.S., there is no mandatory standard for fish oil with limits on contaminants; however, GOED maintains a voluntary monograph with limits on contaminants based on some of the strictest global regulations.

While the monograph is voluntary, it is mandatory for GOED members, which means that all major fish oil manufacturers are complying with the limits of the monograph.

In addition to the GOED monograph, GOED executes a randomized testing program to help ensure that its members are complying with the limits of the monograph.

Number two, sustainability. GOED supports the Handling Subcommittee's plan to work on the annotation for the fish oil listing in order to address sustainability concerns and ensure that fish oil is compatible with organic practices. I refer you to our written comments for annotation suggestions.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

GOED believes that protecting our oceans and natural resources is paramount. It is not only good environmental stewardship, but also ensures sustainable growth for the omega-3 industry as a whole.

Fortunately, most of the fisheries from which fish oils are sourced have either been certified or are currently pursuing certification for sustainability.

While GOED supports sustainable fishing practices, it's important to note that there is no fish species in the world that is caught primarily for human fish oil production.

Fish oil is always a value-added byproduct to fish meal or seafood production because the protein's value is much greater than that of the oil.

Number three, technical report. As mentioned in previous written and oral comments, GOED is very concerned about the quality of the March 2015 technical report for fish oil being relied upon by the Handling Subcommittee.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

GOED thanks the Handling Subcommittee for acknowledging some of our input from our prior comments, but there remain a number of incorrect statements from the technical report that continue to be quoted in the subcommittee's document.

I refer you to our written comments for a more detailed explanation, but GOED respectfully requests that future sunset reviews of fish oil not rely on the March 2015 technical report for fish oil.

In conclusion, GOED encourages the NOSB to retain fish oil on the National List. Please do not ever hesitate to contact GOED with any questions related to fish oil or any other EPA/DHA product. Thank you for your time and your tireless efforts.

CHAIR BEHAR: Thank you. I don't see any questions --- oh, there he is. Tom.

MR. CHAPMAN: Are you able to speak at all to the GOED heavy metal limits and compliance with Prop 65 in California?

MR. RICE: So, we have heavy metal

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

limits for four different heavy metals. I can tell you that our members are complying with those specific heavy metals.

We haven't gone through and picked out all of the heavy metals that are present in Proposition 65 and had our members provide analyses on those. So, I can't really speak to that.

MR. CHAPMAN: Thank you.

MR. RICE: But I will add that I have no reason to believe that they wouldn't be in compliance.

MR. CHAPMAN: Thanks.

CHAIR BEHAR: Thank you.

MR. RICE: Thank you.

CHAIR BEHAR: Robin, are we ready? It looks like --- okay.

DR. HADLOCK SEELEY: Thank you. Good morning and, first, a huge thank you to the NOSB for tackling the issue of protecting wild native marine ecosystems over the past four years.

I come here directly from the coast of Maine to be a reality check on what's really going

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

on in Maine now and in the near future for seaweed.

In the inset on this slide you'll see the take of seaweed has gone up 340 percent since 2002 in Maine, and 95 percent of all the seaweed landings in Maine are one wild harvested species, rockweed or *Ascophyllum*. 2018 was the biggest take of all at 22 million pounds.

Next. As rockweed harvest spreads each year to new places that have virgin stands of rockweed, more and more of the Maine coast is turned from the plant on the left, which is a tall rockweed plant with a flowing canopy, to the hedgy form on the right which has been cut and is trying to regrow with lots of side branches and no canopy.

The problem is that shore birds like the willet, up in the upper right-hand corner, depend on that rockweed canopy that's floating high above for habitat.

Next. Maine has virtually no cutting regulations for rockweed along 98 percent of its coastline, only a 16-inch cut height regulation and no limit on biomass removed.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Next, please. Maine does have the Natural Resources Protection Act which, for everyone in Maine but rockweed harvesters, regulates rockweed beds as coastal wetlands and critical wildlife habitat.

Why don't rockweed harvesters have to follow the NRPA rules? They get a waiver from NRPA requirements if they hold a commercial seaweed license.

Additionally, and alarmingly, Maine very soon will likely have no limits at all on rockweed cutting.

I've been told that the Marine Commissioner believes that because rockweed has been declared recently a private resource by the Maine Supreme Court, the state likely cannot regulate this private resource at all.

Next. And because of this court decision, taking rockweed without permission, as Acadian Seaplants harvester boats and others did this past harvest season, is illegal.

Nature conservancy preserves and other

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

conservation areas were cut and the situation right now is chaos.

So here are my recommendations. One, we can stop arguing about whether this habitat is under-harvested, over-harvested or just-right harvested; whose science is good science or bad science or no science; whether the impacts are significant or whether there are no impacts at all.

By simply following the logic and the lead of state and federal agencies that already protect rockweed, there's no need to reinvent the wheel here.

If seaweed harvests are held to the wild crop standard, and they should be, if permitted at all, a marine version of that standard will have to be written.

After a lot of thought, I support going the certification route. I also support the formation of a task force to consider guidance for important habitat-forming species, wherever they are, ecosystem engineers like rockweeds and kelps.

Thank you.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

CHAIR BEHAR: Emily.

MS. OAKLEY: Thank you for coming and for coming a long distance.

I am curious that you are in favor, after a long consideration, of supporting organic certification because I know in the past you haven't been.

Could you elaborate a little bit further on your thought process on that?

DR. HADLOCK SEELEY: Yes. It was discussions held with others who know more about these things than I do, about the enforcement capability of certification and the lack of any enforcement ability in annotation, if I'm understanding the terms right.

One of the problems we have right now on the water is simple enforcement and to add another thing to the mix that would have no enforcement power just seems pointless.

CHAIR BEHAR: I have a question. Is the coast supported by any other federal laws or oversight?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

DR. HADLOCK SEELEY: NOAA identifies essential fish habitat, or EFH, for each species of fish that it regulates.

And the one that involves rockweed is the juvenile cod, because they recently extended their jurisdiction not just out in federal waters, but up through the intertidal zone.

So what I've told you is just about cod, but that's just because the juvenile cod are using the rockweed.

CHAIR BEHAR: Thank you, Robin.

Next up, Ernie Peterson.

MR. PETERSON: Hi, Harriet.

CHAIR BEHAR: My chicken feed guy. And then John Hendrickson and Elijah Dean on deck.

MR. PETERSON: Okay.

CHAIR BEHAR: In southwest Wisconsin everybody knows Ernie.

MR. PETERSON: Is that good or bad? Probably bad.

So, thank you guys for your dedication because --- pardon me. Okay. Okay. But thank

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

you guys. I know it's a lot of dedication and ---
I may even ask you to help. Thank you.

I'm Ernie Peterson, Cashton Farm Supply, and we were first certified in 1988. Focus has been on poultry. In '96 we went completely organic.

And Harriet, I was thinking it was about 25 years ago you had your flashlight looking underneath pallets for mice, and she's thorough.

The reason I'm here is to beg for 90-some producers that you continue with the present DL-methionine rule that you have.

We serve probably the greatest share of those people at 2,500 or 10,000 birdhouses and there's some up to 20,000 birdhouses.

They're committed to the outdoor access and birds on soil and all those people certainly support the new rule.

I also would like to mention that we're part of the DL-methionine task force and been part of several studies on either lowering the DL or no DL. And I think, you know, you guys have heard

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

the results and arguments on that.

For myself, from '76 to '84 I worked for Ralston Purina Company. From '84 to present I've been at Cashton Farm Supply and most of our emphasis is on poultry, of course.

I've read a lot of the public comments that were sent in this year and a lot appear to be a form letter. When I've looked at rations, I can't find any poultry rations out there that did not have DL-methionine.

The reason I wanted to bring some slides --- and I brought four slides --- the only point I wanted to make, that if we take a slide and if I would put a ration profile together for birds that were in the early part of the lay period, up to like 35 weeks, we would be short methionine with a corn soy. If we would then add --- and I don't know if anybody else can see these --- if we would then add some small grains, we would be even shorter yet.

Once we get into a mid-lay period, we have plenty of methionine with two pounds per ton.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

So the present program you have is one that we can nutritionally support these birds.

I think without methionine, you guys know the effect. I mean, there's pecking, we have dead birds. They're very cannibalistic. We're going to have to feed more protein, you know.

You've been to barns, you know the ammonia problems, you know, Harriet, that comes along with it, the environment, what we do, and then the carbon footprint for more soybean meal.

I was in Denmark this summer and, you know, that's --- at Aarhus where they're trying to extract DL-methionine.

They've certainly proven that you can extract some from a fresh legume, not dried or fermented.

We're going to be able to get some, but we're never going to be able to replace DL-methionine with any extraction method.

And I even met my clock. I guess, really in the summary I'm asking you to continue the present DL-methionine law, not to punish these

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

producers, the farmers, the birds or the environment. Thank you.

CHAIR BEHAR: I have a question.

MR. PETERSON: Yes.

CHAIR BEHAR: So I do quite a few organic inspections and in your area, as you know, and I ask the poultry producers, you know, where are you getting their feed? They say, I'm getting it from Ernie.

And then I say, well, have you worked out a system to make sure that over the life of the bird it will not go over the two tons?

MR. PETERSON: Two pounds.

CHAIR BEHAR: And so, we're have a little trouble out in the field verifying that. I'm wondering if you are offering various levels --- I know you offer starter grower and then laying mash, but I'm wondering if you offer a feed towards the end of the chicken's life when they need a little less methionine just to make sure that those producers that are buying feed from you are meeting the ---

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. PETERSON: Correct. You know, and our mill, of course, is computerized, so obviously it's very technical on what they got. So the records are easy, the audit is easy, okay.

When you take a bird that gets out to that 65-week area, we have an advantage now these birds --- we're going to have a 100-week bird, but people are pushing those birds out into the 80 weeks.

So when we take this 60-plus-week bird, we can drop that methionine to a pound and that is adequate for those birds, Harriet. They have no trouble meeting that.

And, yes, we do have a challenge with producers, as you know. Where's the feed tags? Where's the invoice? They don't know.

So we certainly know that we have to be providing that information and making sure they're changing.

We've had a little bit of a problem communicating with the pullet grower to make sure that we know the DL-methionine levels if we do not

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

grow those.

And we understand that we have --- you know, we emphasize that with these --- whoever is buying the pullets, they have to have those records so we know intake on that.

It's going to be a challenge with intake with the new breeds coming up, you know. You take some of these Lohmanns and the Tetras that don't like to eat versus a Bovan or the Hy-Line where we have higher intake. Those are very easy to meet that two pound.

The new genetics are going to make it a little bit tougher, but it's still acceptable.

I don't know if that answers your question or if I went way too ---

CHAIR BEHAR: So you are offering kind of late-life laying mash that has less methionine in it?

MR. PETERSON: Correct. Yes, we are.

CHAIR BEHAR: Okay.

MR. PETERSON: Yes. And trying to keep records so the auditors will be happy and we ---

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

they can be happy and we can support this.

CHAIR BEHAR: Thank you.

MR. PETERSON: Thank you.

CHAIR BEHAR: Thank you, Ernie.

MR. PETERSON: See, I get out of here quick at dinnertime.

CHAIR BEHAR: No food for the wicked up here.

Okay. So next is John Hendrickson, another person I know, and Elijah Dean on deck with Marisol Oviedo after that. And that may be the last one before we go to lunch.

Go ahead, John.

MR. HENDRICKSON: John Hendrickson, Small Farm Works, importer and seller of paper chain pots.

I'll start with my personal experience.

Paper pots have been in use on my organic farm since 2006. I was indeed the very first one in America to use this product.

I've seen no buildup of paper refuse or deleterious effects of using paper pots in those

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

13 years. Decomposition is complete, from a visual standpoint, within two growing seasons well before two years.

The issues raised by the proposed annotations in the discussion document are complex and there are pros and cons to the various annotation approaches.

On the one hand, the biodegradable standard --- biodegradability, I'm not the only one that's tripping over that word --- standard for paper products might be considered preferable over stating a maximum percentage of synthetic fiber that can be used, given that unknown amounts of synthetic fibers could be present in recycled papers and recycled paper products.

However, as has been noted by members of the Board, the apparent availability of purely synthetic polyester-based papers whose manufacturers claim biodegradability is certainly problematic.

So while a biodegradable standard is a sound idea, I would recommend that perhaps the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

annotation limit the use of paper to bio-based or cellulose-based paper.

The base ingredient in the paper chain pots that I use and sell is cellulose-based, unbleached craft pulp paper.

I would also say that the existing paper chain pots that I use and sell could comply with a standard of no more than 15 to 20 percent synthetic fiber.

The manufacturer of the paper pots that I sell is committed to replacing synthetic fibers with natural fibers to create paper pot products specifically for organic farmers.

The time line for introduction of a paper pot using hemp fiber is scheduled for the 2021 growing season.

It had been hoped to have a hemp paper paper pot product in time for the 2020 growing season, but --- and I say this with good humor --- not unlike the organic standards petition review process, product testing and development takes time.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

The company remains committed and confident they will be successful and have a product by the 2021 season.

Finally, I've said this before, but I believe the issues raised by paper pots are extremely minor in comparison to the use of plastic mulch and flimsy, ultimately disposable, plastic planting pots, products whose usage is vastly greater in magnitude and which are destined for a landfill.

I still have 30 seconds. Should I do a song and dance?

CHAIR BEHAR: Any questions?
Questions for John?

I just want to make sure, so the vinylon is a cellulose-based ---

MR. HENDRICKSON: I did not say that.

CHAIR BEHAR: -- fiber?

MR. HENDRICKSON: I did not say that.

CHAIR BEHAR: Oh, okay. Because you said that it was ---

MR. HENDRICKSON: The paper.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

CHAIR BEHAR: Oh, the paper part was cellulose-based, but then there's 15 to 20 percent synthetics which would be like the vinylon. Okay.

MR. HENDRICKSON: Correct.

CHAIR BEHAR: Just trying to get that straight.

Steve, did you have --- you're thinking about a question here?

VICE CHAIR ELA: So, yeah. I keep trying to wrap my head around it. I mean, I know the cellulose and paper is synthetic because paper is synthetic. There's a cellulose-based, more synthetic fibers that are --- I mean, that help provide some of the structure, and then there's just noncellulose-based fibers.

But in your pots, are they all cellulose-based or are there --- I mean, some of them are more refined than others, I guess, but are there, like, essentially plastic fibers in those pots as well or ---

MR. HENDRICKSON: There's currently vinyl -- in the currently commercially available

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

product, there's a product called vinylon.

VICE CHAIR ELA: And is that biodegradable?

MR. HENDRICKSON: Vinylon --- I actually prepared for this question because I knew it would come up.

The synthetic fiber in the existing paper chain pots, called vinylon, is made from polyvinyl alcohol, or PVA.

PVA is recognized as one of the very few vinyl polymers susceptible to ultimate biodegradation by microorganisms.

Accordingly, increasing attention is being devoted to the preparation of environmentally compatible PVA-based materials for a wide range of applications.

I'd also note that while vinylon in most places is manufactured from petroleum products, in North Korea it is made from anthracite and limestone as raw materials, not petroleum. So, it's actually possible to make it without petroleum.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

VICE CHAIR ELA: You said anthracite?

MR. HENDRICKSON: Like coal, correct.

VICE CHAIR ELA: Coal. Okay.

MR. HENDRICKSON: Yeah.

VICE CHAIR ELA: Thanks, John.

CHAIR BEHAR: Thanks. I think that's it for questions for you. I think we're getting hungry. So thank you, John.

Elijah Dean, Marisol Oviedo and that might be it before lunch. Okay. Thank you. Go ahead.

MR. DEAN: Hello. My name is Eli Dean.

I am an organic grain producer in northern Ohio at Timberlane Farms with my father.

We have 550 certified acres and another 400 in transition. This is our livelihood and we work all season to make that happen.

I'm here today to discuss an important topic, one that is affecting both today's discussion and the Board's broader policy direction. However, it's a pretty subtle issue and its effect is easy to miss.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Meeting time. The NOSB has meetings in the spring and in the fall when the majority of farmers are the busiest.

Producers are perhaps the most vital of stakeholders in the organic movement, yet something as seemingly trivial as the date of the meeting significantly discourages us to attend.

The only reason that I am able to be here today is the exceptionally wet spring and late planting. I would normally be in the midst of harvest.

During planting and harvest, we have extremely long hours and making the travel and attending these meetings is very, very difficult.

This is the precise situation of many farmers that my father and I have spoken to by phone since arriving here in Pittsburgh, farmers that have opinions and would like the opportunity to be here to voice those opinions, but they're far too busy with harvest to do so.

This is an ongoing issue that has been mentioned many times by myself, my father, and I

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

know that my certifier, OEFFA, has for years been including meeting date as a concern in their written submission, and yet the 2020 meetings have already been scheduled in the spring and in the fall.

Some producers have even said that they feel we are being intentionally excluded and that the NOSB and NOP really don't care what we have to say and don't want us here.

I'm not asking for money. I'm not asking for a shift in policy. All I'm asking is that meetings be held when farmers can attend them.

So please, let me ask, can the date for the first meeting of 2021 be set for February 17 through the 19th or is there some major issue preventing the selection of an equitable meeting date? Thank you.

CHAIR BEHAR: Steve.

VICE CHAIR ELA: I recognize the issue.

I'm a farmer. I mean, we're finishing harvest as I speak.

But having served on another board that was farmer-driven as well, we found that nearly

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

--- depending where you are in the country, there's always something being harvested. So, these meeting dates affect you, but if you schedule later, then people in the south or people in California or --- you know, there's just different cycles.

And so, it's hard to --- in my experience, it's really hard to not exclude some farmer group, but I hear the pain and I totally get that.

Are the webinars not accessible? I mean, that, to me, is the best way for somebody that can't travel to take, you know, 30 minutes or an hour and a half to give comments, you know.

We all listen. It's a -- you know, it's an oral back-and-forth. Do you feel like they're not as effective?

MR. DEAN: I agree with your point and I agree that finding a single meeting time that works for everybody is extremely difficult.

Fortunately, the NOSB is having two meetings a year and I think it is reasonable to request that at least one of those meetings be

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

scheduled so that farmers in different areas of the country have an opportunity to attend.

And as to the webinar, I agree, very useful and very helpful. However, I feel that being here in person has a significantly greater impact and I would like the opportunity for more farmers to be able to do so.

CHAIR BEHAR: Emily.

MS. OAKLEY: Yeah. I also just want to reiterate if a farmer wants to come and observe the meeting and participate in the full process, they can't do that over the webinar. So, I was wondering if a September and March meeting time might be feasible?

MR. DEAN: March would be preferable for us, preferably towards the beginning of March, but, yes, that would be better than the current meeting schedules.

MS. OAKLEY: Thank you.

MR. CHAPMAN: Harriet.

CHAIR BEHAR: Oh, sorry. Tom.

MR. CHAPMAN: Let me just --- so you

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

walk away with some knowledge, part of the challenge is they need to be --- they fairly well need to be set off from each other by six months.

There's --- we have to submit our proposals to the program about two months before the meeting date to get it churned through. So, from the last meeting, that's only four months of time to work on issues.

And then, to be honest, because we have other jobs and lives, generally, the month after a meeting not much work gets done. So, we really have a three-month window. And if you don't set those off by six months, then one of those windows gets really tight and it's very difficult. It's already very tight between now and the spring meeting because of holidays as well in there.

So, it's just --- it doesn't answer your answer, but I hope you can at least bring that back to explain to folks that there needs to be a six-month setoff and then maybe other days would work better than the ones we have right now.

I'm not arguing with that, but there

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

is a bit of, like, work timing issues that happen.

MR. DEAN: Yeah. I understand the difficulties. It would be greatly appreciated if something along the lines of maybe February and August, or something like that, would be considered to make progress on this.

CHAIR BEHAR: Thank you.

MR. DEAN: Thank you.

CHAIR BEHAR: Okay. Marisol Oviedo, and I just wanted to ask if Lee Frankel, Julia Barton and Peggy Miars, is it okay with you to go after lunch or do you have to do it before we go to lunch?

I see Peggy saying it's fine. Fine. Lee, fine. Okay, good. All right, Marisol.

MS. OVIEDO: Okay. Hi. I'm Marisol Oviedo with the Northwest Horticultural Council out of Yakima, Washington.

The Northwest Horticultural Council, or NHC, represents growers, packers, and shippers of apples, pears, and cherries in Oregon, Idaho and Washington on federal and international policy and regulatory issues.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

While the NHC submitted written comments on a number of invaluable tools for organic tree fruit growers and handlers, I will be focusing my oral comments on the need to allow the continued use of ammonia-based soaps, magnesium sulfate, and peracetic acid in the National Organic Program.

In many ways, the Pacific Northwest is an epicenter for organic pome fruit production in the United States.

Washington State is a national leader in the production of organic apples, pears, and cherries. Over 18 million boxes of organic apples are now harvested from more than 28,000 acres amounting to over 90 percent of the entire organic apple crop in the United States. There's also a significant amount of organic pears and cherries.

Ammonia-based soaps are used to deter and repel unwanted browsing by animals like rabbits, deer and porcupine that can cause damage to the tree and drip line irrigation.

EPA studies show that ammonia-based soaps undergo a rapid degradation in the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

environment and the agency lists ammonia soaps under the lowest possible toxicity classification.

They are used on an only as-needed basis by organic tree fruit growers.

Magnesium sulfate is used as a soil amendment to improve nitrogen and phosphorous levels in the soil. This, in turn, improves root health of the tree prompting crop growth and health.

Magnesium sulfate is a vital tool in organic soli management. Nearly all of our organic growers use this product.

Peracetic acid is used as a sanitizer or disinfectant for cleaning the packing house and for water sanitation to prevent cross-contamination.

Chlorine, electrolytes, water, and ozone are the only other widely used sanitizers permissible under the National Organic Program and reliance on a single sanitizer can lead to evolution of resistance of pathogens. Nearly all of our organic tree fruit growers use this product.

I understand that the NHC will also be

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

considering the discussion document related to future consideration of sanitizers. We emphasize a critical need for organic growers, packers, and processors to have access to multiple effective sanitizers, both now and in the future.

The number of food from pathogen outbreaks related to fresh produce has increased in recent years and cross-contamination of produce from food contact surfaces has been identified as a primary contributor. Access to effective sanitizers is vital to preventing food from pathogens from becoming established in packing houses.

The ability to rotate sanitizers as well as the use of different sanitizers and orchard tools versus packing house food contact surfaces is necessary to prevent pathogens, in addition to implementing regulations for the Food Safety Modernization Act, FSMA, that are now in effect.

On behalf of the growers and packers we represent, the NHC strongly supports the continued use of these vital tools for insect

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

control and plant health. We ask the members of the board to support the continued listing of these products as they are critical for production -- organic production.

Sorry, I am getting hypoglycemic. I am so hungry.

(Laughter.)

CHAIR BEHAR: Emily.

MS. OAKLEY: Thank you. So, you said that almost all growers are using magnesium sulfate, is that correct?

MS. OVIEDO: I'm sorry?

MS. OAKLEY: Did you say almost all growers are using magnesium sulfate?

MS. OVIEDO: Yes.

MS. OAKLEY: Okay. And so, the annotation allowed with documented soil deficiency, could you just help elaborate for me to understand the soil deficiency that so many growers are experiencing?

MS. OVIEDO: I don't have the exact deficiency. I can certainly get that for you after

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

this meeting.

CHAIR BEHAR: Okay. Thank you.

MS. OVIEDO: All right.

CHAIR BEHAR: So, we had three people before lunch that we're going to push off to after lunch.

We had an hour and a half scheduled for lunch, and so I'm going to truncate that back to an hour and 15 minutes, but we will start here promptly at 2:00 p.m.

(Whereupon, the above-entitled matter went off the record at 12:44 p.m. and resumed at 2:02 p.m.)

CHAIR BEHAR: Great. Thank you. I hope everyone had a good lunch. Our first speaker is on deck and ready to roll, Lee Frankel. And next up is Julia Barton. And after that, Peggy Miars.

MR. FRANKEL: Okay. All right. Thank you very much. Good afternoon. My name is Lee Frankel. I'm the Executive Director of the Coalition for Sustainable Organics.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

First off, I wanted to thank all of the NOSB members for their time and dedication to the industry, and particularly those that have served, kind of, full five-year terms. I do realize that's a lot of work and I appreciate all that you've done and all that you've been able to teach me since I've been participating in these meetings.

I did want to make some comments regarding the June 3rd memo from USDA. I think my major concern is that we --- the industry is feeling like it needs to use, kind of, false information and kind of fake charges in order to try and spur USDA to take action on issues that are of importance to us.

I followed up with the Florida grower that was kind of highlighted, and a lot of the other groups that were saying that there's a problem with the policy and, you know, that grower verbally told me that he's never used glyphosate on that property, that he, you know, did not plow his land and didn't change any of the contours of the land prior to putting his blueberry pots on there.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

So, again, I recognize your frustration as well. I have lots of questions for USDA regarding kind of what's allowed or what's not allowed, but, you know, hopefully we can find other ways of getting USDA to respond without resorting to information that isn't necessarily true for that producer.

The other kind of item I'd like to, kind of, bring up and warn the NOSB and maybe the industry in general, I worry that, you know, I guess I heard a lot of people saying, well, we need to manage the supplies and, you know, supplies are increasing too fast because of containers, but, you know, I guess we also have these unintended consequences, you know.

Here's the most recent 52-week data and it seems like there's obviously other factors happening in the market at any time that explain what's happening or not, but I guess the --- you know, we cut off the supply, but prices didn't suddenly increase and I guess this is at the retail level rather than the farm-gate level, but, again,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

you know, just to, you know, the industry may not be as interested in promoting and expanding the category, now that they feel like their supply options are cut off.

The other kind of hypothetical I did hear was, you know, can a producer be organic, then become nonorganic, and then kind of switch back to organic quickly, and I sort of see that there is some inconsistent applications, you know.

Most of the seedling facilities, you know, will kind of produce whatever is needed, but, you know, there is, you know, in the nonorganic product, they do use nonorganic potting soil for the mix and there is some runoff that hits the floor, but it's not really impacting the actual organic integrity of the next organic seedling batch that might come through and use the same space. So, thank you very much.

CHAIR BEHAR: Emily.

MS. OAKLEY: Thank you for your comment. I just wanted to clarify that there was a letter from Americert International on April 26

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

of this year following our meeting, stating that they had not been applying the three-year transition period to crops grown in containers.

So, it wasn't like a hypothetical and maybe it wasn't happening with someone that you contacted, but there was absolutely a certifier who was not following the three-year transition period in container production.

MR. FRANKEL: And I can --- I grant you that point that, you know, people aren't waiting the three years, but I guess the reasons why, I guess, I was hearing from the industry that we have to revisit that practice is that because people are spraying glyphosate and immediately certifying right after spraying that.

And so, again, we can have our debates as to whether the earthworms in the pots were crawling out from the soil, so we need to be concerned, or if that was, you know, part of the worm castings in the potting mix and so they're, you know, kind of not interacting with the soil below and why do we need it or not. But, again,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

let's have that debate, rather than kind of talking about chemicals that aren't being sprayed or land practices that aren't happening.

MS. OAKLEY: Well, I guess just to reply to that, I think that when I read the regulations, I don't see any except or when that there --- there aren't any exceptions, that it's just something that all certified organic producers go through. It's a hallmark of how we produce.

MR. FRANKEL: Okay. Thanks. I can see the question or where there could have been confusion because it states, on land, and many growers feel like they're not producing on land if they're raised up off the ground or in the NFT channels producing leafy greens that, you know, don't have contact, or in aquaponic systems that are not interacting with the ground immediately below the production.

MS. OAKLEY: So, are you aware of production systems or producers that are not going through the three-year transition period in those systems?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. FRANKEL: I guess prior to the memo I was aware of people -- or people getting certified in a newly constructed facility without a land use history.

MS. OAKLEY: So, do you think that following the memo there are not people growing in greenhouses, that you're aware of, and you -- your coalition members?

MR. FRANKEL: All the seedlings that almost all the growers are using are coming from facilities not following the three-year transition period currently. So ---

MS. OAKLEY: And they're certified organic?

MR. FRANKEL: Yes.

MS. OAKLEY: So, can I ask a question to the Program?

I know that Jenny had mentioned yesterday that she was going to offer additional clarification on that. So, maybe this would be a good time to do that.

DR. TUCKER: I'm going to allow all the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

public commenters to speak, just like we did yesterday, and I'm happy to make a closing statement after the public comments.

MS. OAKLEY: Do you want me to follow back up with you on that or you'll be ---

DR. TUCKER: I defer to the Chair on how she wants to handle that process ---

MS. OAKLEY: Okay.

DR. TUCKER: -- at the end of public comment.

MS. OAKLEY: Thank you.

CHAIR BEHAR: So, I had a question about this slide where you said that the price of tomatoes had dropped. Was that because there was less volume -- or the sales had dropped. Was there less volume of organic tomatoes?

MR. FRANKEL: I think as producers, you know, saw a path forward that they can, you know, take a greenhouse structure, pull out all the equipment, install new, clean equipment, new substrate, new pots that -- you know, they felt like as demand increases, they can go into a

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

production system fairly quickly.

I think, you know, now, I mean, some of those producers are saying, you know, maybe we don't want to spend a lot of time and effort promoting a category that even if demand does pick up, there is kind of no easy way to expand production, or no quick way.

CHAIR BEHAR: So it was, the volume decreased?

MR. FRANKEL: So, the volume basically stayed flat and, you know, but prices still decreased.

CHAIR BEHAR: Okay.

MR. FRANKEL: So, we didn't get the anticipated thing of, as we limit supplies or as we can kind of pull up the ladder on new operations getting certified, you know, we're not seeing, kind of, the surge in prices.

CHAIR BEHAR: And you think that's related to the memo that stopped people from using glyphosate without a three-year transition?

MR. FRANKEL: I think it's kind of based

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

on, maybe, commercial producers having a different look at organics and maybe feeling like, you know, regulations and interpretations of regulations can change or if they're kind of so cloudy, you know, this is not the place to invest a lot of time and money into the industry.

CHAIR BEHAR: Thank you.

MR. FRANKEL: You're welcome.

CHAIR BEHAR: And nobody else? Thank you, Lee.

MR. FRANKEL: Thanks.

CHAIR BEHAR: Okay. Next up, Julia Barton, then Peggy Miars. And after that, Eli Chandler.

MS. BARTON: Good afternoon. My name is Julia Barton with the Ohio Ecological Food and Farm Association.

Thank you to the Board for your service, and to the program for your work, and for the timely publishing of the meeting materials. That really helps us to do our work.

Transparency is one of the foundational

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

values of the organic movement, and one we discuss a great deal at these meetings. There are three items related to transparency that I'd like to discuss with you today.

The first has to do with the results of the National Organic Program's peer reviews. In the organic certification process, an issue of concern that is identified at inspection, and is reviewed and agreed with by the certifier, follows an organic operation until it has been fully resolved.

Similarly, a noncompliance issue to a certifier is made public for the whole community to see and certifiers, much like producers and handlers, are required to submit a plan to correct that noncompliance, and that plan of correction is followed up on at the following audit until it has been resolved. We'd like to see that same sort of process for the Program.

The results of NOP peer reviews must be made public so that these can be followed in a constructive, continuous manner by the community

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

and, most importantly, the future peer reviewers, so that issues of concern are resolved.

The accountability and transparency that we request of producers and certifiers must also be reflected at the National Organic Program.

Similarly, we request this same sort of reciprocal transparency in the grain seed industry. The agenda item, genetic integrity transparency of seed, draws us back to this term and this value.

It baffles us, then, when after six years of discussion and proposals for pilot projects and work towards information gathering and potential thresholds, that we read a proposal to the community for certifiers to tell producers that if they so choose, they can call their seed companies and ask for the genetic content of the seed after they have purchased it.

The seed companies have information which they are only willing to share upon request upon further effort made by the producers who, as we know, are already making so many efforts on the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

ground to protect their crops from genetic contamination.

This proposal does not make substantive forward progress. We urge you to please take it back to subcommittee, utilize input from both producers and seed companies and to increase transparency for the people responsible for growing our food.

Finally, we'd like to see transparency and increased control for the National Organic Standards Board regarding its work agenda.

The National Organic Program is currently so involved and we'd like to have clear, transparent public reasoning when an item is removed from the work agenda, such as the hydroponic and container agenda item that we just discussed with Lee. Thank you.

CHAIR BEHAR: Dave, then Dan.

MR. MORTENSEN: Could you elaborate on the value of NOP being more open with the results of these peer reviews? I'm not that familiar with what that achieves. Thanks.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. BARTON: Yes. Thank you, Dave. Thank you, too, for your comments yesterday, your reflection. I found that really compelling.

I think this is --- it's about transparency. It's about this value that we all say that we think is important. And I thought I explained it pretty clearly, that we'd like to just see the same process that we have kind of flowing downstream to flow back upstream.

So, there are many people in this room who understand the peer review process far better than I do and I've learned a great deal from them, but I think it's not a complex issue for all of us here to understand why it would be important for issues of concern that are identified in the National Organic Program audits to be continuously followed up on over time.

Just as they would be for a producer, just as they would be on our farm if we receive a noncompliance, we have to submit a plan for how we're going to correct it. Our certifier has to approve that plan and then, you bet your boots,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

at our next inspection that will be followed up on to see whether or not we achieved that plan of correction. That then goes back to the certifier and is reviewed.

If we don't have a public process for the Program's peer review audit, it's not clear to me how the community, which is, I think, in the seat of trying to hold --- we're all in the seat of trying to hold each other accountable, right?

But, also, how would those peer reviewers be able, from session to session, just like an organic inspector --- IOIA-trained inspector would do at an organic producer inspection, how would they be able to follow up with the program on those issues that are identified over time? I think it's kind of a no-brainer.

MR. MORTENSEN: Yeah. Thank you.

CHAIR BEHAR: Dan.

DR. SEITZ: Nicki, this is another question about transparency, but on a slightly different subject.

MS. BARTON: I'm Julia.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

DR. SEITZ: I'm sorry. Okay.

MS. BARTON: That's okay.

DR. SEITZ: But you're from Driscoll's?

MS. BARTON: No, sir.

DR. SEITZ: Okay.

MS. BARTON: I'm from the Ohio Ecological Food and Farm Association.

DR. SEITZ: Okay. I apologize.

MS. BARTON: Unless you have a job offer you know about.

(Laughter.)

MS. BARTON: Just kidding.

DR. SEITZ: Okay. I don't have a question. I thought you were from Driscoll's.

MS. BARTON: If you'd like to discuss containers, I think we have a lot to discuss given that last testimony.

CHAIR BEHAR: Thank you, Julia.

MS. BARTON: Thank you.

CHAIR BEHAR: Okay. Peggy Miars, then Eli Chandler and Tina Jensen Augustine.

MS. MIARS: Good afternoon. My name

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

is Peggy Miars. I'm the Executive Director and CEO of the Organic Materials Review Institute, affectionately known by many in the room as OMRI.

OMRI is a nonprofit organization established by certifiers and organic stakeholders in 1997 that achieved ISO accreditation in 2008, which we've maintained since then.

OMRI is recognized as a material review organization in NOP interim instruction 3012, which states that certifying agents may consult with OMRI for crop and livestock materials, as well as for materials used in organic handling. The OMRI products list is a directory of over 7,000 input products that we have reviewed and determined to be compliant for use in organic production and handling.

My brief comments today are intended to address some issues and concerns that were raised as some materials have been discussed during this meeting.

For example, there was a question about who would be responsible for enforcement related

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

to production of marine materials used as crop inputs. While OMRI is not an enforcement agency, our review program staff and external review panel members are experts in material review for organic crops, livestock, and handling.

Although I am not as technically knowledgeable as those individuals, I am confident that given appropriate guidance on review criteria OMRI could review marine materials to determine organic compliance, including conducting field or site inspections, and adhering to any restrictions or annotations.

You've also been discussing vaccines developed using excluded methods. OMRI does not currently list any vaccines. Again, given appropriate guidance on review criteria, OMRI could review vaccines to determine organic compliance, including reviewing confidential manufacturer information, while also considering restrictions or annotations. This way, the manufacturer only has to provide confidential information to one organization and OMRI bears the burden of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

monitoring ongoing compliance.

The Livestock Subcommittee's proposal even mentioned OMRI saying manufacturers of vaccines not produced through excluded method technologies could choose to be OMRI listed as well.

I know that time is of the essence when it comes to animal health and vaccines. While our review times vary based on a number of factors, for the last seven months our immediate initial review times have been two months. So, if OMRI can assist with information, research or writing beyond our regular work of reviewing brand-name inputs, we stand ready to help the organic community.

Thank you for your ongoing work to uphold organic integrity.

CHAIR BEHAR: Emily, and then Ashley after that.

MS. OAKLEY: Thank you so much for your clarifying comments on an annotation and the ability of material review organizations like OMRI to potentially, both review, and monitor and do

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

onsite inspections for an annotation.

How might that work for materials that choose not to go through OMRI certification, or any certification, and are naturals that, you know, would fall, sort of, not through the cracks, so to speak, but don't necessarily have a prerogative to go through a material review organization?

MS. MIARS: So, you're asking what OMRI would do in a situation like that?

MS. OAKLEY: Well, not what OMRI would do, but, for example, as a farmer, if we did an annotation rather than organic certification, I could look for OMRI-listed products that were natural soil conditioners that didn't include any synthetics and just included seaweed inputs, but there might also be products with that same category that didn't go through the OMRI review that were still supposed to adhere to the annotation. How would I, as a farmer, determine that they had, in fact, adhered to the annotation?

MS. MIARS: Okay. I think in that instance, most likely then the certifier would have

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

to do the review, and our technical staff is available to answer any questions that certifiers may have related to that.

CHAIR BEHAR: Ashley.

MS. SWAFFAR: So, I've been thinking about that OMRI and doing the vaccine and stuff, but I kind of worry about that just a little bit because, what if the vaccine manufacturers won't go through that process? We don't want to limit the toolbox of an available tool, and then there's the whole commercial availability piece of the vaccine.

Do you think OMRI could help in that area of --- because it's not just, here's the two vaccines. One's made from excluded methods and one's not; so, you have to use that. There's the form, quality and quantity piece that we put in there. Does OMRI have any solutions on that piece of it?

MS. MIARS: No. I think the certifier would have to be responsible for that.

MS. SWAFFAR: Thanks.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

CHAIR BEHAR: Go ahead, Asa.

DR. BRADMAN: I have a question about OMRI and inerts. On your website you note there's two CAS numbers related to NPEs that you won't review. And I'm curious if --- what clarification you're waiting for and would that be helpful to you?

MS. MIARS: I think that's a technical question that I would refer to Tina, who's going to be up in two speakers.

DR. BRADMAN: Okay.

CHAIR BEHAR: And just to comment, if we could start working on the vaccines, it would be very similar with OMRI. Everything on the OMRI list --- products list is approved, but not everything that's approved is on the OMRI products list.

MS. MIARS: Correct.

CHAIR BEHAR: So, it's not going to be the comprehensive list that the certifiers are requesting, but it's a start, and we already are in this world with many materials.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. MIARS: Right. Yeah.

CHAIR BEHAR: You list potting mixes and --- but not every approved potting mix is on that list.

MS. MIARS: That's correct, if they did not go through OMRI.

CHAIR BEHAR: Yeah. Thank you.

MS. MIARS: Thank you.

CHAIR BEHAR: Okay. Next up is Eli Chandler. Tina Jensen Augustine is after that, and then Chris Grigsby.

MR. CHANDLER: Good afternoon. My name is Eli. I'm the Operations Manager for Thorvin. We're the organic seaweed folks. I'm here today to talk about marine materials. I appreciate the Board's time and efforts in looking into this issue.

I could bore you with all of our sustainability, but I think you've heard way too much of that already. In listening to this discussion over the past day, I've concluded that it's --- in my humble opinion, it is a conversation

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

that is similar to the old conversation of conservationism versus preservationism.

And the best example I can think of for that is a discussion that occurred the turn of the last century with Gifford Pinchot and John Muir, and luckily our president at the time established both the National Forest and our National Parks.

So, I would be hesitant to follow a preservationist mentality because the end result of that, in my opinion, would mean no cultivation of anything whatsoever and allowing most of our farmland to go back to native forests, or prairies, or whatever their original biome was.

So, Thorvin is not opposed to the organic certification of seaweeds for inputs. We would like to see it applied universally to all inputs, versus the single ingredient, and feel that the idea of applying commercial availability to fertilizer inputs overall is a more uniform approach to the principle of continuous improvement in the organic industry. And that's all I have.

CHAIR BEHAR: Emily.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. OAKLEY: So, Thorvin has long been certified organic. Were you the first certified organic?

MR. CHANDLER: No, there were other certified organic sea vegetables. I believe we were one of the first for use in commercial agricultural applications, yes.

MS. OAKLEY: So, my question is why you chose organic certification before the livestock feed requirement, when maybe there wasn't an economic benefit to it or isn't as great of one.

MR. CHANDLER: Well, agriculture is not our only market. We also work in human-use and specialty markets. So, that was part of the rationale.

The organic certification was a verification, at that point in time, of the quality of the material, the cleanliness of the site and the sustainability of the harvest.

CHAIR BEHAR: Dave.

MR. MORTENSEN: Thanks for your comments. You were citing some folks that helped

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

frame your thinking about how we're approaching the marine issue. And I've, over the last year or two, come to realize that I think what we're trying to do there is consistent with Richard Hobbs' book, *Novel Ecosystems*.

MR. CHANDLER: Okay.

MR. MORTENSEN: And that's the idea -- the thinking that we're trying to retain ecosystem services of value to a healthy ecologically sound marine ecosystem, while still be disturbing it and --- so, that's the thinking.

So, I don't think we're trying to hold onto a past ethic or philosophy that's somehow outdated, but actually looking forward and recognizing that when we go in and cut things, whether it's trees or algae or whatever, there is a legacy from that disturbance, and we're trying to figure out how to do that in a sustainable way.

MR. CHANDLER: Thank you. I appreciate that.

CHAIR BEHAR: Sue.

MS. BAIRD: Hi. Thank you for being

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

certified.

Tell me, are you certified to the wild crop harvest standard? And if so, how do you determine and document that you are meeting the standards you have to maintain the culture -- or the colony of that wild crop harvest?

MR. CHANDLER: Okay. So, the harvest that Thorvin is involved with is the harvest that Sandy Mays was talking about earlier in Iceland in the Breidafjordur, northwest Iceland.

The documentation is based on the Icelandic Marine Fisheries Institute's recommendations. They estimate between 1.2 and 1.8 million metric wet-tons of product. They have issued the harvester we work with a license to harvest 20,000 wet metric tons, which is approximately 1 to 1-1/2 percent of the estimated biomass.

Now, what you have to realize about Iceland, I think somebody earlier referenced that Asco is a cod nursery. Cod and langostino fishing is two of the biggest industries in the country

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

of Iceland.

So if the Asco harvest that has occurred there for going on 40 years was having a negative impact on either one of at least those two species, which are much bigger industries and much more important to the economy there, the government regulators would have slowed it down or stopped it entirely.

CHAIR BEHAR: Go ahead.

MS. BAIRD: Yeah. I appreciate you telling me that Iceland has a standard as well. We were kind of --- at least I was, maybe others had more knowledge, but I was --- I've heard that, you know, Maine had a standard that other people --- that maybe other countries did not.

So you're saying that they actually --- all countries, or at least Iceland as well, has standards that they have to adhere to.

MR. CHANDLER: The vast majority of harvests of rockweed, that I'm aware of, have some sort of regulatory body at the governmental level that is responsible for establishing a threshold

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

of what they can harvest and how it can be harvested.

And it's a complex system, of course, because you're dealing with an entire biome, but

MS. BAIRD: Thank you for that.

CHAIR BEHAR: Thank you.

MR. CHANDLER: Thank you.

CHAIR BEHAR: Next up is Tina Jensen Augustine. And I think we're about 40 minutes behind, just so everyone knows.

MS. JENSEN AUGUSTINE: I'll try to keep it brief.

Good afternoon. My name is Tina Jensen Augustine. I'm a senior technical coordinator at OMRI.

Thank you to the Board for the opportunity to comment today. I'll be addressing the topics of marine materials and paper pots.

The OMRI products list includes approximately 3,800 crop fertilizers or soil amendment products.

Of those, 29 products are listed in the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

category of nonsynthetic aquatic plant products, another 100 are listed in the category of aquatic plant products synthetically extracted, 60 products are listed in the seaweed and seaweed products category, and 20 products are listed in the kelp meal category.

These numbers are not necessarily meant as a cumulative tally of distinct OMRI-listed products that are or contain marine algae since they may represent some rebranding or shared ingredients, but I wanted to provide them just as a point of reference. OMRI currently has four products listed for crop fertility that are certified organic marine algae.

In general, OMRI supports the development of standards to ensure the sustainable harvest of seaweed. That said, from a material review perspective, these kinds of standards would be fairly unique. There's no other input material that has review requirements relating to environmental sustainability.

High-nitrogen liquid fertilizers are

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

a class of input product that do have special review requirements. They are singled out by the Guidance 5012 as needing special review. In a similar fashion, ensuring the sustainable harvest of marine algae will necessitate new review requirements that are indicative of environmental harm or lack thereof.

OMRI therefore encourages the NOP to identify clear, consistent parameters that an input supplier, inspector or other designated party can measure and that material reviewers can evaluate.

These parameters should be accessible over a reasonable time frame and also identify any need for ongoing monitoring.

Now, regarding the paper pots petition, OMRI requests that the NOSB clearly define what constitutes a paper pot. Such a definition should differentiate between the plant-derived cellulose lignin and starch components that are synthetically processed into paper, and the types of synthetic additives identified in the technical report such as binders, strengtheners and reinforcement

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

fibers.

OMRI feels that a clear definition will facilitate the review of these materials. OMRI does not think that the proposed Annotation A, virgin recycled paper without colored or glossy inks, provides sufficient clarity. The criteria in proposed Annotation B also have their challenges, as have been discussed.

A requirement for 100 percent bio-based content will result in a situation similar to that of biodegradable mulch stone; however, OMRI considers that a minimum bio-based content or limit on the synthetic polymer additive content for virgin paper could be a reportable parameter that would help ensure that the pots aren't more plastic than paper.

Biodegradability test requirements could also be evaluated by a material reviewer; however, these test results may not be representative of actual biodegradation in the field.

Thank you for the opportunity to comment

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

and for your work on these issues.

CHAIR BEHAR: Steve.

VICE CHAIR ELA: So yeah, I just --- so how would --- just to give us some idea of how we could or should proceed, you echoed our sentiments that just the listing for no glossy inks is not sufficient, but then you had some reservations about bio content or biodegradation.

I mean, in your opinion, you know, what --- how should we --- you know, where should we head the ship?

MS. JENSEN AUGUSTINE: It's a really good question. I think there's been so much discussion because there's not a really good, clean-cut answer. I personally think that one thing that --- from a material reviewer perspective, we need things that are measurable.

I think that measuring biodegradability is --- it's possible with the test methods provided, but I don't know that those measures are necessarily reliable. I feel that looking at what a manufacturer puts into a product is, in some ways,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

more measurable.

When we review products, we get a formulation statement of all the ingredients and the purpose for their addition to that product. And so we can look at how much of it is paper coming from plants versus other synthetic additives. So that would be, in my mind, a measurable thing that we could look at.

And so if the NOSB could determine what an appropriate level for these different --- the content of these different components could be, that's something that an organization like OMRI could evaluate.

CHAIR BEHAR: Thank you.

MS. JENSEN AUGUSTINE: You're welcome.

Asa, did you want me to comment on the NPEs question?

DR. BRADMAN: That would be great. Thank you.

MS. JENSEN AUGUSTINE: Okay. So a number of years ago in the process of doing product reviews, OMRI was looking at a product that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

contained nonylphenol ethoxylates, and of course trying to determine whether they were on EPA List 4 or List 3. And it came to light in our correspondence with the applicant and also EPA officials, that some NPEs had had the wrong CAS number assigned to them or they were being represented by the wrong CAS number.

And we never got to a point where we could get clarity on which was the correct CAS number, and so it kind of seemed like a black box, and that's why we determined to not allow those for the time being.

And I think you asked kind of what we're waiting for in order to move forward. It's not an issue that we're currently working on. I think, if anything, that we would hope that further work on inerts could be done, and we could move away from using obsolete EPA lists.

DR. BRADMAN: Okay. Thank you.

MS. JENSEN AUGUSTINE: You're welcome.

CHAIR BEHAR: Okay. Next up is Chris Grigsby, then Mary Capehart and Alecia Bock.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. GRIGSBY: Good afternoon, everyone. First, I'd like to thank the NOSB members and outgoing Board members for your work and commitment to the organic community. And thank you to the NOP for their recent work on increasing enforcement, training and oversight. And also thank you for the butterfly.

My name is Chris Grigsby, certification director at MOFGA. Briefly, I'd like to speak on the issue of integrity. As former general manager of the largest food co-op in Maine, I would echo the comments from PCC yesterday regarding consumer trust and questions that will only continue as the industry grows.

We must keep an eye on that all of our collective work is and should be done for the purchasers, consumers and eaters throughout the sector. Our work is not for the benefit of the industry and lobby efforts, farmers, handlers, politicians, et cetera.

Okay. Marine materials. We stand by our past and current comments regarding our

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

concerns of requiring organic certification marine materials used in crop inputs.

While we support the sentiment of the subcommittee to address this from an environmental harm and whole ecosystem standpoint, we feel that without additional guidance definitions or rules to assist certifiers within the certification process, we present a false sense of complete oversight and thoroughness.

Simply requiring organic certification as it currently stands is not enough. This was conveyed in my panel presentation yesterday, and we support the formation of a working group or task force. While we recognize that the rulemaking process is slow at best, guidance and clarification does not have to be.

The fact that industry continues to advance much faster than the rulemaking can match, we sometimes find ourselves, as certifiers, in a difficult situation. OFPA intent relies on not only continuous improvement of the program, but also that the secretary and NOP would be willing to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

provide guidance when needed.

The decision to allow hydroponics, from what I understand, had less to do with whether that production model fits within the organic regulations and more to do with the fact that the regulations and guidance don't explicitly prohibit it.

That's a flawed interpretation which could have been remedied early on by the NOP through guidance to certifiers. The same is true for continuous transition of livestock. We know from experience that once things are permitted, they are very difficult to retract.

To me, the NOP program handbook is underutilized as a tool. In particular, the use of policy memos to certifiers. The suggestions from NOP and NOSB that certifiers work amongst themselves to develop consistent policies and utilize ACA best-practice documents is a positive approach on face, but the concern is the nonbinding nature of this approach.

In a world of increasing litigation,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

pushback and documented issues in the media, it is imperative that certifiers have binding guidance and rules to enforce as opposed to internal or ACA policy positions.

We ask that the NOP consider their full authority to administer the program and to uphold their responsibility within the public-private partnership. In many cases, relying on consistent interpretation from certifiers has had detrimental and irreversible effects. Thank you for the opportunity.

CHAIR BEHAR: Emily.

MS. OAKLEY: I just want to say that the last portion of your comments echoes a conversation that I've had with some Board members and that we --- we did have on a CACS call as well, how to address the issue of questions that come from certifiers to the program and don't always get resolved in a timely fashion, and then disparate interpretations take place among certifiers creating different systems in place.

So I'm going to get with you on that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

after this. So thanks for those comments.

MR. GRIGSBY: Okay. Great. Sure.

Thank you.

CHAIR BEHAR: Thank you.

MR. GRIGSBY: Thanks.

CHAIR BEHAR: Next up, Mary Capehart.

Then Alecia Bock and David Will on deck.

MS. CAPEHART: Good afternoon. My name is Mary Capehart, and I am a certification senior specialist at Organic Valley.

We currently represent nearly 2,000 certified organic farmers in 34 states. Organic Valley supports Option 1 listed in the document, allow all vaccines without any review or consideration if they were produced through excluded methods.

Vaccinations are a necessary component of good animal welfare and this recommendation ensures organic dairy farmers have the needed tools to provide the best animal health and care possible. Both the European and Canadians have adopted all vaccines are allowed recognizing the importance

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

of preventing disease and suffering in animals.

Excluded methods in vaccine manufacturing are used to make vaccines safer and more effective for the animal. If we deny use of these methods, we increase the risk to organic animals.

Commercial availability, although a good option, assumes the organic industry could pressure the manufacturers to provide a product that does not include excluded methods. Due to the small size of their organic vaccine buyers and the high cost of development, we have reason to believe this pressure will not influence vaccine manufacturers.

Commercial availability could represent a barrier for organic farmers from preventative methods which would prevent disease and sufferings in their animals. Several effective vaccinations developed using excluded methods are highly important as they protect against amniotic diseases such as salmonella. These diseases are a risk to both animals and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

farmers.

The organic philosophy defers to natural processes; however, over cases such as disease prevention, this can be an ethically questionable approach. In nature, if disease invades a native population of animals, the result is generally an epidemic.

Animals which do survive will develop a productive immunity, but some will suffer for long-term effects of the illness. It is critical to keep this in mind that the goal is to prevent suffering and disease.

In addition, I'd like to add we strongly support the proposed rule of --- on origin of livestock and urge the USDA National Organic Program to publish a final rule as quickly as possible, and thank you so much for all your hard work and commitment, and my cows.

(Laughter.)

(Off-mic comments.)

MS. CAPEHART: Any questions?

CHAIR BEHAR: Dan.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

DR. SEITZ: You made a statement that the use of excluded methods in producing vaccinations has made those vaccinations safer and more effective. What is that based on, that assertion?

MS. CAPEHART: It's based on five veterinarians which I spoke with.

DR. SEITZ: Excuse me? I'm sorry, I didn't hear you.

MS. CAPEHART: It was based on five different veterinarians that I spoke with in regard to the effectiveness of vaccines.

DR. SEITZ: So do you have any idea where they gathered their information? Was that an observation or published research, or simply your conversation that surfaced that as a ---

MS. CAPEHART: I don't know ---

DR. SEITZ: Okay. Thank you.

MS. CAPEHART: -- the answer to that.

CHAIR BEHAR: Thank you.

MS. CAPEHART: Thank you.

CHAIR BEHAR: Okay. Next up is Alecia

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Bock, and David Will, Steve Walker on deck.

MS. BOCK: Hello. My name is Alecia Bock with AgriSystems International. My comments are mainly my own, but I'm also sharing feedback from some of my baking and meat product clients today.

I'm in support of relisting all the handling sunset list materials, and I have comments on a few specifically. First, dairy cultures. While I generally understand your rationale for removing a redundant listing, I think it could be confusing because dairy cultures have historically been considered a unique category.

However, if you decide to move forward, perhaps the new listing could read microorganisms, including dairy cultures. Second, yeast. Several of my clients have expressed a critical need to keep yeast on 205.605. Commercial availability, viability and consistency is not where it needs to be especially on the fresh yeast side.

We continue to work with our suppliers,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

but so far the organic options have not worked in all processing applications. Third, celery powder. The irony of some of the comments yesterday were not lost on me, first, hearing much debate about whether cured meat is safe then switching to the topic of organic tobacco.

In my opinion, we are not here to judge whether certain products should be on the market.

Even more ironically, food safety is the main reason for the use of celery powder and that wasn't even brought up. Those who know me know how passionate I am about food safety. As a consumer, I am also passionate about consumer choice and letting the market decide.

In my former life, I grew up in the conventional meat industry, and I was involved in the novel idea of using celery powder to replace sodium nitrate as a curing agent. Currently, I have clients who sell certified organic processed meats. Though they don't currently use celery powder, they support the relisting of this material knowing that it's the only current way to produce

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

a cured organic meat product.

I am thrilled to hear that the \$2 million was granted to research organic celery powder and Swiss chard for this purpose. This is the way 205.606 was supposed to work. It worked for the transition to organic hops, and it can work for organic celery powder.

But if we remove celery powder from the toolbox before further research can begin, then all we do is remove consumer choice. Instead, we should be incentivizing growth, as was said earlier today, increase organic acreage, organic livestock and organic meat product options.

Today, I was in 7-Eleven trying to find a protein snack. I found a meat-stick/cheese combo that contained natural uncured hard salami minimally processed, no added nitrates or nitrites except those naturally occurring in cultured celery powder. This is an FSIS label claim and is outside the scope of USDA Organic Program.

My point is that the conventional meat industry will continue to produce and market these

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

natural products because consumers want them. As a consumer, I wish I could have purchased an organic meat-stick using organic celery powder this morning.

Finally, just a comment on fatty alcohols. I don't smoke, but I support the choice of consumers to smoke and specifically to purchase organic tobacco. They all may have their personal reasons. Perhaps it's to reduce pesticide use or to promote more organic crop conversion. Maybe it's just to support organic family farmers. After hearing all the testimony on this topic yesterday and today, I support the addition of fatty alcohols to the National List. Thank you for your service.

CHAIR BEHAR: Thank you.

Okay. Next up, David Will with Steve Walker and David Moore on deck.

MR. WILL: Okay, Harriet. I asked for a free 10 seconds because I have to scold you. I can't believe with all the baseball going on right now and the fact that the Nationals are in --- you don't quite understand. Here is at bat, on deck,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

and the third person is in the hole. Okay.

(Laughter.)

MR. WILL: Okay. So we're good. You can hit the button and I have a slide. Okay. Thank you very much.

My name is David Will. I'm general manager of Chino Valley Ranchers. We're egg producers in California. I'm the chair of the Methionine Task Force and the chair of the California Shell Egg Advisory Board, and my comments are based on those two positions.

I want to thank you very much for the rule you have on methionine and the relisting and we hope that it continues. Our Methionine Task Force is made up of a numerous number of members, which we account for about 86 to 90 percent of the entire organic egg industry in the United States.

We represent members of all forms of production. We have members as small as 1,500 birds and much larger and all different styles; outdoor access, massive outdoor access and limited outdoor access.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Harriet, at the last meeting in Seattle you brought Methiomax to our attention. We appreciate that. We've looked into it. Unfortunately, the methionine content in it is 0.0007 percent per pound, so we would have needed a mere 2,500 pounds per ton to equal two pound of methionine.

(Laughter.)

MR. WILL: So we did do our homework. Unfortunately, it didn't work out. You might want to use that land for something else because I knew you grew a couple of those.

One of the things that we get a lot of comment on is the EU. That's been brought up a couple times what they've done, and behind you is the slide that deals specifically with the Journal from the European Union that has to do with egg and egg production as far as their adjustments.

The first one --- or if you go to points 6 and 7 -- is that they do allow a 5 percent exemption and that's due to quantity and quality of organic feed. So you can use nonorganic feed such as

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

shellfish and other starches and other proteins because of the poor protein quality.

It was supposed to sunset in 2018. It did receive a two-year extension. So it is in effect until the end of 2020, and we're going to monitor it to see if it continues. We're also doing a deep dive to find out what that 5 percent includes, but more importantly are the two points above it.

Again, it was allowed to continue, and it basically says in the EU, you can allow a poulet that's 18 weeks of age grown conventionally to be put into the organic program. We're day two of life in the United States. We are 0.001 percent methionine at a two-pound cap over the life of the flock. So 18 weeks versus a 5 percent exemption, they do have ways around some other things and they get the major growth in.

We are still looking at our insect trial. We're doing some more deep dives into that and I also think that black soldier fly has made a tremendous amount of news. And I think that's a lot from the fact that we've done the work. And

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

just remember that in the EU, they use slow-growth broilers. They may not use it in layers. We're all stuck with the exact same genetics that we see.

So they have the same genetics in Europe as we do in the United States. Thank you.

CHAIR BEHAR: I have a comment about the Methiomax. That was actually in the Organic Valley public comment. And the purpose of it was not to be used as a replacement for methionine, but it was supposed to amplify the methionine that was present.

But in further research since the last meeting, it doesn't seem to be --- it's more of a product claim than an actual ---

MR. WILL: Which is exactly what we found, too.

CHAIR BEHAR: And it's used to actually --- it's sold to humans as well to --- like, as an energy or for bodybuilders.

MR. WILL: Yeah.

CHAIR BEHAR: Since I don't do any of that, I don't know. I'm not really the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

bodybuilder.

Dave.

MR. MORTENSEN: Thanks for the presentation.

MR. WILL: You're welcome.

MR. MORTENSEN: You used some terms that I'm not familiar with, and I was curious if those are standard categorical labels or if those were just loosely used. You said limited outdoor access, outdoor access and massive access. Are those categories, or are those just terms ---

MR. WILL: No, that was just ---

MR. MORTENSEN: -- you just were using?

MR. WILL: I didn't want to call out specifically, you know, who our membership is, but we have members that are outdoor on soil, members that are outdoor on five to 10 foot per bird, and we have members, including some of our production, that's out on 108 square feet per bird.

And as you remember in the Seattle presentation, Dr. Burley even referenced that when they had dissected birds that had been outdoors

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

in a pasture-type setting, that they found less than 1 percent of their craw was actually material in intake not only --- not just insects, but just even stuff from the ground. So the birds still --- they eat what's put in front of them, is the easiest choice.

MR. MORTENSEN: Thanks.

MR. WILL: Uh-huh.

CHAIR BEHAR: Asa.

DR. BRADMAN: I just have a follow-up.

Sorry if it's a little off-topic, but do the people that you work with generally support the Organic Livestock and Poultry Production standards?

MR. WILL: You mean the OLPP?

DR. BRADMAN: Yeah. And would they like to see that implemented?

MR. WILL: I will tell you I am the chief fundraiser for that for the Organic Trade Association and there are a majority of like-minded industry. Unfortunately, I think it's the majority of the certificate holders, the minority of the bird count, but we do support and ---

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

methionine is easy because it impacts all of us.

Our membership is broad and it's --- OLPP is not something we take to our membership.

I think we'll end up probably getting involved in vaccines because, again, it applies over everyone equally. OLPP is a company choice and a decision, and it's a lot more restrictive.

CHAIR BEHAR: Ashley.

MS. SWAFFAR: So I have two questions. You touched on it briefly, but we've heard from a lot of commenters about, well, in Europe they use slower-growing breeds. Can you touch on that on the layer side and how that might be a challenge?

MR. WILL: You know, in the United States we're 5 percent of the entire population of layers --- we're 5.4 percent, 17 million out of 330 -- and we're really left to the same few genetic strains.

They have the same here in the United States. Most of them are owned by European, the blood stock and the parent stock. So you'll find that a lot of the Lohmann and the Hy-Line offshoots

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

and the Bovans here as you will across the pond.

So on the layer side it's very restrictive. On the broiler, I just don't know specifically, but the layers, they're dealing with the same genetics as we are.

MS. SWAFFAR: Same birds here as in the UK?

MR. WILL: Uh-huh.

MS. SWAFFAR: Okay. And the other part --- you didn't touch on vaccines. Do you have an opinion on that?

MR. WILL: Yeah. I'm from California and we make everything tough. And, as you know, we had California Prop 2 and then again Prop 12 was just passed. And part of it was we defended Prop 2 at the Food Safety Initiative, and we're one of 50 states and came up with the vaccine requirement of having a live and a killed salmonella, which is obviously one that's being reevaluated.

I think my main opinion is just you've got 49 other states that are looking at what we've

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

done. You've got food safety issues, and you're going to have a very uncooperative vaccine market that -- as kind of what Peggy alluded to, proprietary information is proprietary for a reason.

And also, you know, there's --- I may have a disease, you may have the same disease, but it's a different strain of that disease, so you need a different vaccine. And what works for me may not work for you, and it's just geographic in nature. So it's going to be tough. It's going to be a daunting list.

CHAIR BEHAR: Thank you.

Steve Walker, with David Moore and Michael Hansen in the hole.

MR. WALKER: Good afternoon. I'm Steve Walker, operations manager at MOSA. In our many comments on seed purity and other GMO issues over the years, we've emphasized a need for fairness and wider USDA support to ensure our organic community is not solely responsible for preventing genetic trespass.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

The seed genetic integrity transparency proposal notes a good area for improving education and doesn't create more undue burden on organic farmers. Yesterday, we heard from Kiki Hubbard that seed suppliers are willing to share contamination info, but few producers are asking; however, we certifiers already can inform farmers about their options. We don't need instruction to do so. The same end might be achieved with a wider audience through info and NOP's learning center.

Yesterday, we also heard some debate about the effects of robust discussion on biotech.

Our community is united in opposition to genetic engineering and organic systems. We're sort of done talking about it; but with ongoing outside threats, our thoughtful discussion must be heard elsewhere. Beyond preaching to the choir, we must be heard on the street to protect our interests.

USDA must invest in a more functional coexistence.

Data will help. We support NOP funding a task force to collect data detailing the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

contamination problem. This will add sensible enforcement. We also support prioritizing research related to our coexistence with GMO crops. Yesterday, David Gould said we need more transparency from biotech developers to proactively protect organic.

I was reminded of a similar comment I brought to NOSB five years ago. I had noted a Lutheran church statement on genetics, faith and responsibility. The CLCA statements says, human beings are innovative stewards called to be responsible to the Golden Rule. It says, we must respect and promote the community of life with justice and wisdom. This imperative should be used to direct genetic research and knowledge in ag and other areas.

It's a moral requirement for those with expertise to share knowledge with policy developers. Our robust conversation shows we're honoring our side of the coexistence concept. We need more fairness and transparency from USDA. IFOAM's fairness principle says, organic ag should

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

be built upon relationships that ensure fairness with regard to the common environment and life opportunities.

USDA also must support the principle of care managing agriculture in a precautionary and responsible manner to protect the health and well-being of current and future generations. Thanks for your work on these challenging issues for so many years.

CHAIR BEHAR: Thank you, Steve.

MR. MORTENSEN: I just have a quick, quick question.

CHAIR BEHAR: Dave.

MR. MORTENSEN: Yeah. Thank you for the thoughtful comments. Could you say a little bit more about how the certifier's role could be seen as the helpful go-to resource on information about the seed farmers are purchasing and planting?

MR. WALKER: Getting information to farmers ---

MR. MORTENSEN: Yes.

MR. WALKER: -- as suggested in the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

proposal?

MR. MORTENSEN: How do you envision that that could address the issue ---

MR. WALKER: Yeah, I don't ---

MR. MORTENSEN: -- of making the information available. That's what I understood you were saying.

MR. WALKER: I don't have a problem with the proposal, but -- you know, a big problem with the proposal. It just --- it sets up a four-step communication process where NOP tells the certifiers that they can tell the farmers that they can ask the seed suppliers and, you know, why not just put it a little more directly and put it in, you know, wider-based educational efforts.

And there's also a couple --- this gets a little nit-picky, maybe, but there's a couple words in there like "suggest" and it almost starts to sound a little bit like consulting. And there is a line between consulting and providing public information that's, you know, available to everybody.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

And I don't think that this at all crosses that line, and sometimes I think that that distinction is a little bit overblown in our minds, you know. We can answer questions, sometimes it depends how they're worded, but why not just put education out there about options and make that part of a wider effort rather than issuing instruction to certifiers that now we have to follow and so forth.

CHAIR BEHAR: Steve, just --- not all certifiers are as proactive in communicating with their operations. So I know, you know, you say you're already working with your growers, but not all do that. So we're trying to make that a little bit more universal.

MR. WALKER: Promotion, marketing, education, and get the word out.

CHAIR BEHAR: Okay. Thank you.

MR. WALKER: Thank you.

CHAIR BEHAR: Okay. Next up is David Moore, Michael Hansen and David Ferman. Okay. David Moore. Thank you. Michael Hansen, I see

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

him walking. And after that, believe it or not, is our last speaker, David Ferman. Go right ahead.

MR. MOORE: Good afternoon. I'm David Moore. I'm the California-licensed agricultural pest control advisor. I'm a qualified applicator.

I work for Neudorff, and I'm here to keep ferric phosphate on the National List.

I come from preaching folks, so I'm going to quote chapter and verse. I'm going to start here in the National Organic Program at 7 Code of Federal Regulations part 205.601(h).

Ferric phosphate is the only material you are voting on. You are not voting on EDTA because at 7 CFR part 205.601(m), EDTA is an allowed synthetic inert ingredient which sunsets in 2022 along with the rest of List 4.

You're also not voting on EDTA because it's already in the law at 7 U.S.C. 6517 which states, synthetic inerts not classified by EPA as being a toxicological concern are allowed. Only EPA has authority to determine inert and active ingredients in pesticide formulations. And at 7

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

U.S.C. 6518, the Board shall review available information from EPA.

6517 and 6518 are OFPA. OFPA is the law. And under that law, NOSB's stated mission is the implementation of that law --- NOSB's statutory mission. NOSB's stated mission includes reviewing public comments. So you-all know that the public is strikingly silent on ferric phosphate.

Of 12,018 public comments, one single comment objects to relisting ferric phosphate. The NOP has explicitly instructed the subcommittee --- and by extension this Board --- to consider and vote only on ferric phosphate.

Lastly, OFPA 6517 sets out three criteria for review; harmful to health or environment, necessity and compatibility with organic farming. Since 2005, NOSB has consistently found that ferric phosphate meets these criteria and so it continues to do today. No new information to the contrary has been presented to or by this Board.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

There is no scope within the law or the regulations to vote to delist ferric phosphate and you must vote accordingly. I'm David Moore. I work for Neudorff. Thank you for your attention and consideration. And since I have a minute, I'll say at least in California without Sluggo, there is no organic celery. Thank you.

CHAIR BEHAR: Dave.

MR. MORTENSEN: Yeah. It's also our mandate to carefully review efficacy data, and we have done so. And I just would say that it's very important for us to look at the marketed product when we think --- at least certainly it is when we're looking at the efficacy data because that's what was applied in those field trials, and the chelating agent has an enormous effect on the efficacy of ferric phosphate.

So while we understood that we were looking at ferric phosphate, we also have to understand that the way in which it's formulated and applied to a field will influence the efficacy.

And in this case, it influences the efficacy by

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

something like an order of magnitude or greater.

The knock-on effects of that is that it effects soil health by having effects on earthworms and other populations in the soil. So it's important that we are following the guidelines, but we are also recognizing the fact that when these compounds are used in the field, they need to be in concert with the ecology of the soil and the organic system plan. Thank you.

MR. MOORE: The assertion that ferric phosphate and EDTA are --- as a combination are harmful to earthworms comes from a single publication produced by a competing pesticide manufacturer that does not operate in the organic world, and we believe that a substantial portion of that has been refuted effectively. We've submitted such evidence in comment and written submissions.

MR. MORTENSEN: We had very limited published data to go on, and that was one of the papers that we went on, and it was also carefully reviewed in the technical report.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. MOORE: The technical report is frequently cited as holding that there's an 80 milligram per kilogram LD50 for the combination.

That is entirely untrue and the very simple evidence of that is that the EDTA --- or the EPA-approved label for Sluggo, which is ferric phosphate and EDTA, for Ferox, which is iron EDTA, bears a caution label. The federal limit, the minimum allowed LD50 is 500 milligrams per kilogram.

In my office, I can go and pull that information out of a book on the shelf. That statement of 80 milligrams is simply untrue, and it's been perpetuated for 10 years. We've tried to refute it in public comment and with submitting public research. It's simply untrue. It's a red herring.

CHAIR BEHAR: Dan.

DR. SEITZ: You went through the chapters and verses very fast. There was one chapter or verse that was something to the effect that the NOSB shall review findings or information

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

from --- was it the EPA?

MR. MOORE: Review available information from EPA.

DR. SEITZ: Yeah. Okay. So I read that as meaning we shall review it, but not necessarily that that would be dispositive in terms of a final decision on our part. In other words, we can exercise independent judgment from that other agency.

MR. MOORE: Yes, but that --- it bears to the issue of an active versus an inert and to the publication in materials related to this meeting of the assertion that there's the 80 milligram per kilogram LD50, which is untrue.

CHAIR BEHAR: No other questions?

MR. MORTENSEN: Just back to that, and it's not really worth arguing over, the Board has to have efficacy data. And it's important that we have peer reviewed efficacy data that we can make a judgment on.

And so if you're of the opinion that the one peer reviewed paper that we could find and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

that was in the technical report is not accurate, then you're finding fault with the peer review process in published papers. I would say that it would be helpful for a company to seek collaborators to have their work evaluated and published in the peer reviewed literature so that a board like this can make an objective assessment of the performance of the product.

I don't think anybody on the Board, because I was on all those conversations, has questioned the fact that slugs are a problem and also that this product works. The thing that we got caught up in the discussion of is what are the nontarget effects, and there is not a lot of literature there. We went with what we had to go on when we did that assessment.

MR. MOORE: We cite three peer reviewed papers in our public comments to this meeting to refute the Edwards paper on earthworms.

MR. MORTENSEN: Well, I will just stop here, but I would say it was not compelling to me that the efficacy differences were as you are

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

stating.

MR. MOORE: I don't believe I made a statement about efficacy differences, but according to CCOF's public comments, 309 of their certification clients find it very effective and have it in their organic systems plan.

MR. MORTENSEN: Thanks.

CHAIR BEHAR: Thank you.

MR. MOORE: Thank you.

CHAIR BEHAR: Michael Hansen, and then our last speaker will be David Ferman.

MR. HANSEN: Good afternoon. My name is Michael Hansen. I am senior scientist with Consumer Reports, an independent nonprofit organization that works side by side with consumers to create a fairer, safer and healthier world.

On genetic engineering, we commend Dr. Tucker for clarifying that gene editing is an excluded method. We urge the NOP to formally adopt the NOSB recommendations on excluded method terminology from 2016 through 2019 and implement them through guidance. We also support the present

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

proposal to add induced mutagenesis developed via use of in vitro nucleic acid techniques to the table of excluded methods and to support further work by keeping induced mutagenesis developed through exposure to UV light, chemicals and irradiation on the to-be-developed list for future discussion and review.

We also urge NOSB to add embryo rescue in animals where there is no use of hormones in either the recipient or donor animals to the table of not excluded methods since we think that, for precautionary reasons, hormones should not be used for superovulation on the donor animals due to potential health impacts on the offspring.

On genetic integrity transparency for seed grown on organic land, we support the proposal for the instructions to certifiers with one, small word --- one small, one-word modification that we mentioned in our comments as a good first step. We also think the Board should request NOP to set up a task force to gather data on the levels of genetic contamination and seeds, and work further

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

on this issue with the goal of ultimately setting tolerances for seed planted on organic land.

For vaccines, we support the change to Section 205.105(e), which makes clear that vaccines produced through excluded methods can only be used when an equivalent vaccine not produced through excluded methods is not commercially available.

In addition, we urge the Board to ask NOP to work with APHIS to develop a list of which veterinary vaccines have been produced using excluded methods or not, using the USDA publication veterinary biologic products, licensees and permittees as a starting point. Using the methodology mentioned by the subcommittee, we found that 75 vaccines were produced using excluded methods in the October 1st, 2019 version of the publication.

Finally, we urge the Board to remove celery powder from the National List particularly when it comes from conventional celery grown with synthetic nitrogen that is prohibited in organic production. You've heard that IARC has classified

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

processed meat as carcinogenic to humans based on sufficient evidence of consumption of processed meat that causes colorectal cancer.

Given the health problems associated with processed meats in the world that added nitrates and nitrites may play in those health problems, we do not think that nonorganic celery powder should be allowed in organic productions.

Thank you.

CHAIR BEHAR: I just have to say, wow, you covered a lot. Emily.

MS. OAKLEY: I had a question regarding your comments on fish oil.

MR. HANSEN: On what?

MS. OAKLEY: On fish oil. Could you elaborate a little bit more on the data -- I'm sorry, on the data that you provided that the health benefits that are claimed by fish oil are unproven?

MR. HANSEN: Yeah. That's actually --- I didn't have time to talk about that, but yes, there's actually very recent studies that have found --- let's see if I can find them --- that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

fish oil claims are not supported by research. Let me see the most persistent one. Yes. Earlier this year a large-scale randomized placebo-controlled trial involving 25,871 participants, women 55 years or older and men 50 years or older, who were followed for 5.3 years found that, "Supplementation with M3 fatty acid did not result in lower instance of major cardiovascular events or cancer than a placebo."

This is perhaps the largest study of its kind. There's also a disconnect between the study showing the benefits from eating fish and the benefits of omega-3 supplementation.

So, you know, some of the data is really showing that just having the supplement doesn't seem to be having an impact on health compared to eating the whole fish. And I think this is similar to people focusing on individual nutrients and trying to get them rather than get them from a whole food.

CHAIR BEHAR: Tom, and then Dave.

MR. CHAPMAN: I'll pass. Dave.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

CHAIR BEHAR: Dave, and then maybe Tom.

MR. MORTENSEN: Yeah. I was wondering if you could say a little bit more about how the Animal/Plant Health Inspection Service is tracking vaccines derived from excluded methods.

MR. HANSEN: Yeah. That's actually --- here's the --- they put this publication out at least twice a year and it's basically a listing of all the veterinary biologic products.

And so vaccines and all various vaccines are listed there, and then for each type of vaccine, they say how many folks are making it. And I was just using the code of if the fifth digit is a D or an R, that means it's a recombinant vaccine or uses an excluded method.

And some of them will even say "chimera," which that will tell you that that's excluded. And so you can do this and this is something that I think could be done where you take this list, you can determine which vaccines are engineered.

And for some categories, all the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

vaccines will be engineered and other ones won't be. And right there in this list for the ones that aren't, there is a licensee number and it will say, for example, 188. And you just look at the beginning and there is their contact information and everything.

So having a chart --- developing this would be very easy to do based on what's already put up and updated. And in our written comments, I had based it on the July 31st --- this is August --- October 1st, and we found even new ones there.

So I think by doing that rather than putting the burden on the certifiers, this should be something very easy to do. And if you wanted to go even further, they could, you know, bring in OMRI for some of the ones because at the --- at our NOC pre-meeting there was somebody who said, wow, they've heard from some of these manufacturers that the supposed nonengineered vaccines are actually engineered.

But I think this is a good first step and that would be something that would be very

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

useful because then you could tell very quickly whether there is a nonengineered one available or not. So it's an easy first step and it puts what's already put out in a very useful form, and I don't think it would take that long of time for somebody to do.

MR. MORTENSEN: Thank you.

CHAIR BEHAR: Tom, you were passing?
Okay.

Thank you, Michael.

MR. HANSEN: Thanks.

CHAIR BEHAR: And last but not least,
David Ferman.

MR. FERMAN: Hello. I'm a marketing director, David Ferman, for BrightHouse Organics. I wanted to first thank the NOSB for your dedication and hard work, and I want to let you know that we support the increased efforts for scrutiny in the supply chain to limit organic fraud. I think that's great. I also want to thank the NOP for the continued support for organic certification of greenhouse-grown container systems.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

In a couple of the comments that were made yesterday that mentioned --- they requested the banning of containered production methods for organic certification, and I think that's of grave concern --- at least it is for me --- and I would think it's a big step backwards for organics if that were to happen. The words yesterday, soul of organic, were used and I also thought about some words from November of 2016 where they talked about the magic of the soil. And I think about that language really as kind of fluff used to distract from the real motivation for that opposition group, which would be to limit supply and artificially --- and benefit from the higher price that would result. So really purely economic.

In actuality, the allowance of certified hydroponic container-growing methods have dramatically helped the organic consumer by increasing supply to meet demand, providing year-round availability, and adding competitive pressure to reduce price premiums. As a consequence, organics are now more attainable and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

affordable than ever before. One example is with tomatoes, where currently over a quarter of the organic supply is grown in container-based greenhouses, and price premiums have reduced over the last five years from over 90 percent down to 66 percent.

Really, the organic consumer is winning here with an affordable product that's available year-round in all of their grocery stores. That wasn't the case 10 years ago. Any action to ban these production methods would have a dramatic impact on the market availability, and the pricing would hurt the organic consumer significantly.

Second, as we heard that the --- you must improve the soil. I think that when you use that argument for banning container systems, those folks are ignoring the consideration of the diversity of the total system, both the cultivated land as well as the wild land.

In actuality, greenhouse-grown hydroponic container systems require about 87 percent less land space for any given output level.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

So you have a lot less arable land that needs to be converted from wild land. They also use about 90 percent less water. So they are, therefore, the most environmentally friendly methods for production. It's a natural evolution of modern farming.

So as organics grow with increased hydroponic container greenhouse operations, there is less impact on the natural habitat. Now, Harriet, you mentioned yesterday that, you know, the goal is we can feed the world with organic, and I think that's absolutely admirable. I look at organics right now in the U.S. It's about 7 percent organics as a function of the total from produce perspective.

And to feed 7.7 billion people in the world, I think we need to embrace innovative technologies like greenhouse growing and further advancement in technology for the organic consumer.

Emily.

CHAIR BEHAR: Emily.

MR. FERMAN: Sorry.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(Laughter.)

MS. OAKLEY: Thank you. Do your greenhouse-grown hydroponic growing systems follow the three-year transition period?

MR. FERMAN: They do, but I don't think they should. I believe the three-year growing mandate should be --- should have some common sense applied to it and was originally I think crafted prior to significant greenhouse growing operations. But yes, all of ours do.

MS. OAKLEY: I'll just refute that. I think that the persistence of chemicals varies widely on the chemical makeup of each chemical, and some of them are highly persistent over a long period of time -- longer than the three-year transition period, and they would be persistent in a greenhouse and the surfaces that they touch.

So I think that there are clear reasons why we have that and we don't have an exemption in our rules. That's my interpretation.

MR. FERMAN: Understood. I think that particular instances for high-tech greenhouses,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

for example, where the earth sits beneath concrete and has sat there for multiple years, that converting from a conventional system to an organic system with replacement of all of the irrigation and the buoys and all of the materials that would come in contact with the root zone would be more than sufficient. And unfortunately, I think that it's going to restrict, you know, companies like us, as Lee mentioned earlier, from continuing to advance the supply.

MS. OAKLEY: Well, let me help you understand why I don't think that works, because then you're asking us to have a case-by-case basis and examine the chemicals or inputs that were prohibited that were used, which creates a nightmare scenario. I think the reason that we have a general prohibition and a general requirement for a three-year transition period is to have a level playing field, and it's also one that is easy for everyone to understand and adhere to, rather than trying to come up with a list of those products or prohibited substances that might

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

not need to go through the three-year transition period, which it seems is something that you might be suggesting.

MR. FERMAN: No, and more of just the system itself and whether or not it would make sense for the root zone to contact the actual area. I know that we talked about earlier the case that was kind of proven to be false for spraying glyphosate over and then immediately growing -- putting pots down. And, you know, in that sort of situation if that was the case, yeah, totally agree, you need three years. I don't think it's necessarily the case for systems that don't operate in ground.

And the level playing field piece, I'm not sure if I totally agree with that either. And my Tesla doesn't take unleaded fuel and my digital camera doesn't use nitrocellulose film. It's an innovation that's advancing the industry forward.

MS. OAKLEY: I just can't let you have the last word on this one.

(Laughter.)

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. OAKLEY: Where those materials are applied, how they are persistent is totally a matter of debate, but the reality is that we have a law that was agreed upon, that was adopted by Congress, and that organic farmers voluntarily agree to adhere to, and we do not have any exceptions written into that law that allow for any exemptions to follow those practices. And the three-year transition period is very clear and I think I'm glad that you follow it, but I hope you don't come back here advocating that we should stop following it.

(Applause.)

CHAIR BEHAR: Dan. And just so everyone knows, we're 45 minutes behind.

DR. SEITZ: And this is a comment, actually. I would find it ironic that a conventional farmer who wishes to transition to organic and has to patiently work his soil, or her soil, for three years and not get a premium for selling the products during that time would be required to abide by a three-year period for

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

transition.

And yet, someone who would like to immediately set up a hydroponic operation and apply prohibited substances would immediately have access to a premium market. I just --- I want just to state this as a comment that I would find that highly ironic.

CHAIR BEHAR: As I said in my opening statement, I don't think this is a settled issue. Emily, you really want that last word; don't you?

MS. OAKLEY: No. I just want to say that if we are done with public comment -- and Jenny indicated that it was at your discretion to ask her to comment on this topic -- that this might be the right time to do that.

MR. CHAPMAN: Point of order, I mean, this is public comment. If the public commenter wanted to respond to anything, I think it would be open for them to speak.

CHAIR BEHAR: Well, I believe we are at the end of the public comment session.

MR. FERMAN: Thank you.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

CHAIR BEHAR: Jenny, you said you might be able to answer Emily's question at the end of the public comment session.

DR. TUCKER: So we are at the end of the public comment session, and I think just as we did yesterday, I think it's appropriate to thank everyone who gave a public comment, and let's give them all a big round of applause. Thank you for being here.

(Applause.)

DR. TUCKER: And so I did say that I'd be happy to follow up on comments as needed, and clearly this is a topic of continuing interest. I would say that my comments from yesterday are my comments now. All container systems must meet regulatory requirements related to the use of prohibited substances on land.

The three-year transition period is tightly connected with prohibited substances, and that's why we talk about land use histories. And so the certifiers need to make decisions for each individual operation that they certify based on

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

the regulations. And so certifiers responsible for making those decisions, any farmer who has questions about how transition or how the rules apply to their operation need to contact their certifiers. We will continue to monitor certifiers as we do across all practice standards.

CHAIR BEHAR: Emily.

MS. OAKLEY: So we heard from a commenter that he is aware of greenhouse growers not going through the three-year transition period.

If I, as a farmer or consumer, were to file a complaint on something like that, what would the result be with the NOP?

DR. TUCKER: So anytime we get a complaint, a complaint is reviewed to determine what is the issue at hand, what is the applicable regulation, and what is the evidence. So we would review any complaint in that light and pursue accordingly.

CHAIR BEHAR: Emily.

MS. OAKLEY: Just the last question. Is the NOP aware of greenhouses that are currently

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

growing without going through the three-year transition period?

DR. TUCKER: I am not.

CHAIR BEHAR: Okay. I don't see any other comments. I'm sure we will continue this conversation at some point or another. So I'm going to move --- I'm not going to take a break right now because we're so far behind.

So the Handling Subcommittee will begin. There are no proposals. It's just a very long list of sunset materials, and as is our usual method, I turn over the running of the meeting to the subcommittee chair, Asa.

DR. BRADMAN: Thank you, Harriet. Michelle, is this working in terms of sound quality?

Okay. So I was expecting a break.

(Laughter.)

CHAIR BEHAR: Asa, Devon will be putting up the material.

DR. BRADMAN: Okay.

CHAIR BEHAR: And then Devon will read into the record ---

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

DR. BRADMAN: Okay.

CHAIR BEHAR: -- the name of the material, the annotation ---

DR. BRADMAN: Okay. I see a few hand signals going on there.

(Discussion off the record.)

CHAIR BEHAR: So everyone wants to take a break, which means that we will go longer than probably we had planned. So if you want to take a break, I'm open to that. Ten minutes ---

DR. BRADMAN: Okay.

CHAIR BEHAR: -- which probably means 15.

(Whereupon, the above-entitled matter went off the record at 3:33 p.m. and resumed at 3:44 p.m.)

CHAIR BEHAR: Okay. Everyone back in your seats, please. Was that refreshing? All refreshed for the next marathon?

Okay. So, the way this works is I will turn this over to the Handling Subcommittee Chair, Asa. And before each material that goes up for

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

sunset, it'll be up on the screen before you and Devon will read the summary. So it's all -- it's just going to flow like clockwork.

Asa, it's all yours.

DR. BRADMAN: Okay. I hope everyone can hear me okay, and please mention if my distance to the mic is not working.

So, the first substance we're going to be reviewing today is -- voting on today is citric acid. And, Devon, I think you're going to introduce it for us.

MR. PATTILLO: Yep. Thanks, Asa. We'll start the sunset reviews with substances used in organic handling, found in Section 205.605 of the National List. This section of the National List includes nonagricultural, nonorganic substances that are allowed as ingredients in or on processed products labeled as organic or made with organic. These substances may be used as ingredients in or on processed products labeled as organic or made with organic in accordance with any restrictions specified in the section.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Section 205.605 is divided into paragraph (a) for nonsynthetic substances and paragraph (b) for synthetic substances. We'll start with nonsynthetics in paragraph (a).

And the first substance is listed as acids, citric, produced by microbial fermentation of carbohydrate substances.

DR. BRADMAN: Thank you, Devon. Lisa, I think you're on deck for this one.

MS. de LIMA: So, citric acid is produced through fermentation. It's widely used in food processing. According to public comment, it's used to control pH, used as an acidulent, a buffer in gel formation to stabilize colors, and as an ingredient in dietary supplements.

In the organic produce sector, it's widely used in the formulation of disinfectants and sanitizers, allowed for use in direct contact with organic food without the need for a rinse, a practice which is essential for complying with FSMA requirements for raw agricultural commodities.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

It's also used for controlling pH in wash water, used for post-harvest handling of fresh fruits and veggies. Additionally, the neutralizing of pH of wash water thereby reduces the amount of chlorine that needs to be added to the water.

Two commenters wrote in that citric acid should be reclassified as synthetic unless it's possible to define nonsynthetic citric acid by annotation. They further stated that citric acid was originally added to the National List based on TAP reviews that gave a simplified version of their production using fermentation.

No new information was brought forward in terms of harm to human health or the environment. And that's about it.

DR. BRADMAN: Okay. I want to open it up for discussion. Any comments, questions, discussion for citric acid?

No? Then let's take it right to a vote.

So, all those in favor of a motion to remove citric acid based on -- uh oh, am I doing

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

something wrong? A second?

CHAIR BEHAR: Did you just make the motion, Asa?

DR. BRADMAN: What was that?

CHAIR BEHAR: You need to make a motion before we vote.

DR. BRADMAN: Okay. I'm sorry. So I want to make --

CHAIR BEHAR: Unless someone else --

MS. SWAFFAR: Point of order. Point of order. These motions have already come to us made and seconded from the Subcommittee. So we will just proceed to vote.

CHAIR BEHAR: Oh, just vote.

DR. BRADMAN: Do you want -- yeah, that's how I understood it.

CHAIR BEHAR: Somebody was just telling me we had to vote. I just was doing what Steve told me to do.

(Laughter.)

MS. SWAFFAR: Point of order. Hasn't the program historically read for us?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

DR. BRADMAN: Yeah.

MR. CHAPMAN: No.

DR. BRADMAN: Okay.

MS. SWAFFAR: Okay.

MR. CHAPMAN: No, normally the Chair reads it.

DR. BRADMAN: So I was just -- yeah, my plan was to read the motion. So, a motion was brought by the Subcommittee to remove citric acid based on the following criteria in OFPA and/or 7 C.F.R. 205.605(a) if applicable. And the motion was made by Lisa and seconded by Scott Rice. And now we're going to vote as a full Board.

CHAIR BEHAR: Okay. So we will go to a vote, and we will start with Ashley.

MS. SWAFFAR: No.

MR. CHAPMAN: No.

MS. de LIMA: No.

DR. SEITZ: No.

MR. MORTENSEN: No.

DR. BRADMAN: No.

VICE CHAIR ELA: No.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. RICE: No.

MS. OAKLEY: No.

MR. BUIE: No.

MS. BAIRD: No.

MR. GREENWOOD: No.

CHAIR BEHAR: And Chair votes no.

MR. RICE: That's 13 no, 1 absent. The motion passes -- or fails. Excuse me.

CHAIR BEHAR: Okay. Asa, next material.

DR. BRADMAN: Okay. Now we're going to move on to lactic acid. Devon, if you could introduce that for us.

MR. PATTILLO: Thanks. We'll continue with nonsynthetic substances in 205.605(a). And the listing is acids, lactic.

DR. BRADMAN: Lisa?

MS. de LIMA: So, lactic acid, originally isolated from sour milk. Today it's produced through carbohydrate fermentation. Uses from public comment included as an acidulent, a flavor enhancer, a buffer, coagulating agent, pH

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

control agent, as a carcass wash, and as a processing agent in conjunction with celery powder.

In the organic produce sector, it's widely used in the formulation of disinfectants and sanitizers, allowed for direct contact with organic food without the need for a rinse, similar to what I just talked about with citric acid. And, similarly to citric acid, it's also used in controlling pH in wash water.

And, again similar to citric acid, two commenters wrote in that lactic acid they thought should be reclassified as synthetic. And, again, no new information was brought forward in terms of harm to human health or the environment.

DR. BRADMAN: Opening this up for discussion or comment by Board members?

No comments? No? Okay. Then why don't we take this to a vote.

So, a motion has been brought to the Board to remove lactic acid based on the OFPA criteria in 7 C.F.R. 205.605(a). I think we're ready to vote.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

CHAIR BEHAR: Okay. We'll start the vote with Tom this time.

MR. CHAPMAN: No.

MS. de LIMA: No.

DR. SEITZ: No.

MR. MORTENSEN: No.

DR. BRADMAN: No.

VICE CHAIR ELA: No.

MR. RICE: No.

MS. OAKLEY: No.

MR. BUIE: No.

MS. BAIRD: No.

MR. GREENWOOD: No.

MS. SWAFFAR: No.

CHAIR BEHAR: Chair votes no.

MR. RICE: That's 13 no, 1 absent. The motion fails.

CHAIR BEHAR: Asa, you can go to the next material.

DR. BRADMAN: Okay. Our next material now is calcium chloride. Devon, if you can introduce that.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. PATTILLO: Thanks, Asa. Still in Section 205.605(a), and the listing is calcium chloride.

DR. BRADMAN: Tom, I think you're up on this one.

MR. CHAPMAN: Calcium chloride is used a wide variety of food applications, particularly in tofu, cut fruit, canning applications as a sodium replacement, as a water adjustment, and as a nutrient supplement.

Public comment at this round mimicked the public comment we received in the spring with several certified operations speaking to its necessity in several trade associations and certifiers speaking to its wide usage.

There were two comments from interest groups that, again, as in the spring, raised concerns about the allowance for up to seven percent impurities. But that is what's on the USP and FCC monographs for these items. And there was not, I guess, any real justification as given to why they raised an objection on the seven percent

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

impurity of a substance produced like calcium chloride.

DR. BRADMAN: Any discussion by the Board?

No comments? Okay. Then I think we're ready to go to a vote on calcium chloride.

So the Subcommittee brings a motion to remove calcium chloride from 205.605(a) on the National List based on OFPA and the 7 C.F.R. 205.600(b).

CHAIR BEHAR: Okay. We will go to a vote, starting with Lisa.

MS. de LIMA: No.

DR. SEITZ: No.

MR. MORTENSEN: No.

DR. BRADMAN: No.

VICE CHAIR ELA: No.

MR. RICE: No.

MS. OAKLEY: No.

MR. BUIE: No.

MS. BAIRD: No.

MR. GREENWOOD: No.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. SWAFFAR: No.

CHAIR BEHAR: Chair votes --

MR. CHAPMAN: No.

CHAIR BEHAR: Oh, sorry. Chair votes
no.

MR. RICE: That's 13 no, 1 absent. The
motion fails.

CHAIR BEHAR: Asa, you can go to the
next substance.

DR. BRADMAN: Now we can go our next
substance, dairy cultures. And maybe this will
be a little more exciting.

(Laughter.)

MR. PATTILLO: Thanks, Asa. The next
listing is 205.605(a) for dairy cultures.

DR. BRADMAN: Steve, I think you're on
deck for dairy cultures.

VICE CHAIR ELA: I am. You know we had
to create some controversy of our own. So, in a
nutshell, no opposition to renewing, relisting
dairy cultures. Everybody is in favor of it. In
the public comments, they're obviously widely used

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

and critical to the dairy industry.

The main issue here is whether dairy cultures are covered by microorganisms, and most commenters agree that they are. The debate becomes not whether they're important but that some people want to keep dairy cultures listed separately because they say they serve a unique and functional difference from other organisms. If consumers don't see dairy cultures on the National List, they may think that they aren't organic.

And other commenters were that listing microorganisms on National List does not easily match or translate in lay terms to the appearance of cultures on an ingredient label.

Some people argued that the listing is not redundant, that from a technical and phylogenetic perspective, we might be able to view them as a subcategory of microorganisms. However, dairy starter cultures include a unique subset of microorganisms used for certain dairy products to create a desired outcome.

Other comments did say the dairy

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

cultures are covered by the listing for microorganisms, and one recommended that dairy cultures be removed from the National List. But they wanted to make sure that we provided criteria for doing so in the recommendation. And, as we heard in public comment, the write-up for dairy cultures does actually include a paragraph that specifically states that dairy cultures are included under microorganisms. And that would also be put on the cover sheet depending on how the vote goes for this.

I don't think there's much doubt that it does -- that they could be folded into microorganisms. It just then come down to a Board discussion of whether that's the preference or not.

It could be argued that it's redundant. It can also -- obviously, some people feel very strongly that they like that listing kept separately. My personal opinion is that it's redundant.

So, there was also some comment on the process, that using the sunset listing to delist it because it's redundant may not be proper, that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

we should go through a work agenda item with an annotation change, or basically an annotation revocation, I guess.

We put this before the program as far as this process when the Executive Committee and we all agreed that this probably was an appropriate process. So, I understand the argument. But the National Organic Program, as well as the NOSB, through the executive process was okay with this process. We did run it through the system.

So, with that, Asa, I would open it up for discussion and questions.

DR. BRADMAN: Thank you, Steve. Anyone like to opine on this issue? Dan.

DR. SEITZ: I don't want to opine. I want to ask a question. If there's anyone who's on the Board who's in favor of keeping this as a separate listing, for purposes of informing the consumer or for some other reason, I'd just be interested in hearing that, just because it seems to me, either way, it won't change the actual practices. So just curious to know if anyone feels

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

there's a good reason for a separate listing.

DR. BRADMAN: Tom.

MR. CHAPMAN: Not to throw it right back at you, Dan, but I'm also interested to know your opinion being a consumer rep.

(Laughter.)

DR. SEITZ: Well, I did not know until I started reading this -- well, I guess I always knew that cultures were microorganisms, sort of.

But it never occurred to me that they were a subset of microorganisms. So that was a fairly new understanding on my part.

I do feel more comfortable when I read a label and I see that it says "dairy cultures." That, to me, says more than if I saw microorganisms. But I also understand that there's no limitation in listing dairy cultures. So, from an aesthetic standpoint, I like the idea of simplification without losing substance.

DR. BRADMAN: So, is this a dialogue with Tom? Or, Lisa, I think you were going to comment.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. de LIMA: I mean, I'll just add that I've been working in retail for 20 years and I've probably had one or maybe two conversations with a customer that even knew what the National List was, which is alarming but actually true. People really don't get it at this level. I mean, I have employees that don't get it at this level that work in the store level. If someone came up to them and asked about the National List, they wouldn't necessarily know.

So I'm not concerned about it from that standpoint. And once it got cleared up that they'd still be able to list it, however they're listing it currently, that I'm less concerned. But I don't actually feel strongly about it either way.

DR. BRADMAN: Ashley.

MS. SWAFFAR: So I think if we're going to remove a substance like this, we need to have a robust discussion on rationale. And there's some things that were said that the dairy industry was very concerned that dairy cultures wouldn't be listed.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

And I just want to say, you know, a lot of the label claims that they provided us didn't actually list dairy cultures. They had a whole bunch of other acids and things like that. So they didn't specifically say dairy cultures on the label.

And then the comment that folks felt that this was not the appropriate time for this.

I just want to say that I feel like this is the most appropriate time for that. And the only time to delist a sunset item is during the sunset process. So I just want to ease those fears out there that this is the time for that.

And I would like to ask the Subcommittee, in your proposal to the program or in the cover sheet, are you going to explicitly state that dairy cultures are microorganisms so fears can be alleviated?

DR. BRADMAN: Steve.

VICE CHAIR ELA: In answer to that, yes.

I mean, it's already explicitly stated in the proposal. But I think it never hurts to restate

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

that.

I will also say one of the reasons that they have been separated in the past -- and, I mean, I don't want to say older Board members; Board members with more experience may be able to jump in. But at least in taking this over, prior to this, the list of ancillary substances for the two listings were different.

And I think the Food Additives Council noted that, and it may have been Stoneyfield from the spring meeting. But public comment in the spring brought those two to align where the list of ancillary substances is the same.

So, really -- and if you look at the write-up for the two of them, I did both of them, you'll notice they're extremely similar. So, that could've been one of the arguments in the past to keep them separate, along with that they were added at different times. But I just want to bring up that the ancillary substance list is the same for both of them at this point. So, the write-up is duplicate.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

DR. BRADMAN: Tom.

MR. CHAPMAN: I mean, the ancillary substances process and review is still kind of in process. I don't know if that was the reason back in the day, because that started recently. That was, like, 2014, 2015.

The one thing I'll note that is slightly confusing to me is the last technical review on dairy cultures is not in the petitioned substances database under dairy cultures; it's under microorganisms. And you got to go to that, and that's where we did the first technical review asking about ancillary substances.

So that's, I guess, for these highly informed consumers roving the stores with the National List or their computer looking this up, if they wanted to get even more technical data, they would still need to be able to make that connection that it's a microorganism. Flip over to that list and then find all the information they want to find on it.

The other point that, you know this is

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

a half a dozen, you know, six on one end, half a dozen on the other kind of deal. Sue brought up the question about non-dairy yogurts. And I looked up a couple labels and they say "live cultures."

And I guess, similarly, you could have confused consumers going on labels, looking at the National List and then finding dairy cultures and being concerned that they're buying a non-dairy product. But it's based on a dairy culture.

And so is that a compelling reason to take it off? No, but, you know, you can make that argument in multiple different ways, I guess is what I'm trying to say. And I don't know. It just seems like a redundant listing. It seems like a lot of work to do it through another petition process or a work agenda item.

DR. BRADMAN: Dave.

MR. MORTENSEN: Just following Ashley's comment about a robust discussion. I appreciate Ashley's comments.

For me, it makes a great deal more logical sense to not have dairy cultures and have

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

it nested in microorganisms. I think, as we think about excluded methods, the group, the microorganism group, is a targeted area that we're going to have to pay a great deal more attention to going forward in the very near future.

So I would prefer to see us get all the microorganisms under one microorganism; including yeast, actually, but certainly dairy cultures. And so I'm going the same direction as everyone else that's spoken.

DR. BRADMAN: Harriet, and then Tom.

CHAIR BEHAR: So, back in ancient history when OFPANA -- when OTA was OFPANA, there was a subcommittee called the MPPL. And I know someone in the room who was in that subcommittee with me. Manufacturing, Processing, Packaging, and Labeling Subcommittee.

And when the National List was being put together between -- the rule wasn't even out yet. It was after the OFPA was passed but before 2002. The program, as it was then, what, three people, came to the organic community and industry

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

and said, we're putting together this National List as required under the OFPA, and what should we do?

And so people came together and put things on the List. And so this is a holdover from then, not much of a process, really. It was just, like, yeah, we better have dairy cultures on there so we can be making yogurt and cheese and tempeh.

I know that's not a yogurt culture, but -- and at that time, I was working at Organic Valley and I was the person who submitted the dairy cultures.

But at this time, we have a much more structured system rather than just kind of throwing things out there and hoping they get put on the list. So I support moving this to microorganisms because that's really where it belongs. And as we clean up our National List and make it more uniform, I think that's all a good thing.

DR. BRADMAN: I think I have Scott and then Emily and Tom. Tom, Scott, Emily. Sorry.

MR. CHAPMAN: As I do when I go shopping right now, flipping through the petition substances database. So I can probably opine on why I think

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

they're separate listings and that's that dairy cultures was petitioned in '95 and microorganisms was petitioned in 2002.

So it looks like dairy cultures were first and then a more broader microorganisms came through from when people wanted to make soy sauce.

So that's probably why, and then it's lasted since then.

I agree with -- if yeast had no other annotations on it, I would be totally in the same boat of trying to cut yeast out and drop it under microorganisms. I think yeast is in a separate bucket now a little bit because it has a strong specific annotation that restricts it further than other microorganisms. Although it could be fair to say, why is that evaluation not being done on microorganisms?

DR. BRADMAN: I think we're going to Scott, Emily, and then Harriet.

MR. RICE: Yeah, I agree with much of what's been said, but just as a fan of sort of clean, tidy, and efficient, and kind of looking at we did

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

get a couple of comments from certifiers who agree that the listing was not necessary and redundant.

I don't see any issues from that perspective in terms of taking this one away.

DR. BRADMAN: Emily.

MS. OAKLEY: This is a comment to the USDA that it's so important to have Board members that have historical and institutional knowledge about this process. And so I hope as new members are appointed they will be able to supply some of that and we will not lose as much as we're losing.

DR. BRADMAN: Harriet.

CHAIR BEHAR: So, when we were discussing this in subcommittee, I tried to figure out were there any dairy cultures that were not microorganisms? And I just didn't know, you know, some of kind of strange cheese made in wherever, and I couldn't find any.

So I don't think by taking this off the list that we will restrict any new products. Or, everything that would have been and could be made using dairy cultures will be covered under the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

microorganisms.

DR. BRADMAN: Steve, and then maybe we can end the discussion.

VICE CHAIR ELA: Yeah, I just want to be clear. When I said the ancillary substances, I did not think that was the original reason. But in the spring comments, that was one reason that people argued for them to be, separate because they had a different ancillary substances list. So, I want to be clear on what I meant on that.

DR. BRADMAN: Okay. I just want to make one comment and then close the discussion, unless anyone has anything very -- something they really have to say.

But basically one thing about combining them is that hopefully the next time around we'll save whoever is reviewing this a few hours of time by consolidating it. And we're spending a fair amount of time right now. But, going down the road, we may be saving hours of time for people. So I think that's one argument in favor and certainly understanding our demands of time, it's really

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

substantial.

So I think we're ready to go for a vote on dairy cultures. And Harriet, do you want to direct that? Oh, I'm sorry. I have to go through the motion.

So, the Committee is a bringing a motion to remove dairy cultures from 205.605(a) based on OFPA and the 7 C.F.R. 205.600(b).

Harriet.

CHAIR BEHAR: So, we'll go to a vote, starting with Dan.

DR. SEITZ: Yes.

MR. MORTENSEN: Yes.

DR. BRADMAN: Yes.

VICE CHAIR ELA: Yes.

MR. RICE: Yes.

MS. OAKLEY: Yes.

MR. BUIE: Yes.

MS. BAIRD: Yes.

MR. GREENWOOD: Yes.

MS. SWAFFAR: Yes.

MR. CHAPMAN: Yes.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. de LIMA: Yes.

CHAIR BEHAR: Chair votes yes.

MR. RICE: That's 13 yes, 1 absent.

The motion passes.

MR. CHAPMAN: I do want to make it clear it's a "yes, I love dairy cultures" as part of my vote.

CHAIR BEHAR: I wanted to say, yes, moo.

(Laughter.)

DR. BRADMAN: So now, Devon, we want to cover enzymes if you could introduce that.

MR. PATTILLO: Thanks, Asa. We're still in Section 205.605(a), and the listing is enzymes. It must be derived from edible, nontoxic plants, nonpathogenic fungi, or nonpathogenic bacteria.

DR. BRADMAN: Okay. So I want to open that up for discussion by the Board.

Steve, did I see you -- I'm sorry. You're on deck right now to introduce it. Thank you.

VICE CHAIR ELA: Yeah. This can take

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

20 seconds. There's widespread support for the relisting of enzymes. Really, the only main comment is that enzymes should be classified as synthetic unless annotated to define those that have not undergone synthetic chemical change. And the review of ancillary substances should include all such substances, including those on the National List.

So it's just basically nobody said we shouldn't relist enzymes, but there is some discussion that wouldn't be part of the sunset review of whether they are synthetic or nonsynthetic.

DR. BRADMAN: Okay. At this point, I want to open it up to the Board for discussion or comment. Anyone?

Okay. No? Then I think we're ready to go to a vote.

CHAIR BEHAR: Okay. So we go to a vote, and now we start with Dave.

MR. MORTENSEN: No.

DR. BRADMAN: No.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

VICE CHAIR ELA: No.

MS. de LIMA: Point of order. Was a motion made?

DR. BRADMAN: I'm sorry. Keep reminding me. Next year I'll get it right.

So, the Committee is bringing a motion to the full Board to remove enzymes from 205.605(a) on the National List based on OFPA and the 7 C.F.R. 205.600(b). So, now I think we're ready to go for a vote.

CHAIR BEHAR: Okay. We will start over.

We'll start with Dave.

MR. MORTENSEN: No.

DR. BRADMAN: No.

VICE CHAIR ELA: No.

MR. RICE: No.

MS. OAKLEY: No.

MR. BUIE: No

MS. BAIRD: No.

MR. GREENWOOD: No.

MS. SWAFFAR: No.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. CHAPMAN: No.

MS. de LIMA: No.

DR. SEITZ: No.

CHAIR BEHAR: Chair votes no.

MR. RICE: That's 13 no, 1 absent. The motion fails.

DR. BRADMAN: Okay. So our next substance is L-malic acid. And, Devon, if you could introduce that.

MR. PATTILLO: Thanks. The listing at 205.605(a) is L-malic acid, CAS No. 97-67-6.

DR. BRADMAN: Okay. So, Scott, I think you're onboard with this one.

MR. RICE: I am. L-malic acid is used as a flavor enhancer, a flavoring agent, adjuvant, and pH control agent in a variety of foods. It occurs naturally in many fruits and veggies and can be obtained by enzymatic conversion of fumaric acid by fermentation. However, it's not economical to extract L-malic acid from natural foodstuffs.

In the first round of sunset review this

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

past spring, a number of commenters questioned whether commercially available L-malic acid is indeed from nonsynthetic sources, as the listing restricts. Commenters noted that while supporting documentation may state L-malic acid is produced naturally via enzymatic fermentation, that statement refers to only the second half of the process.

The major commercial source of L-malic acid is enzymatic conversion of synthetic fumaric acid to L-malic acid by immobilized microbes. If the malic acid produced by this method is synthetic, most if not all of the L-malic acid on market is therefore synthetic.

We received comments. Well, first of all, it was clear to the Subcommittee that the material should be reclassified and placed on 205.605(b) to reflect that commercially available sources are a product of a synthetic process.

That reclassification can't be completed via sunset, so the Subcommittee is proposing to relist this material and address the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

reclassification as a separate work plan item for consideration in the spring, which we are indeed looking to do.

Comments on this. We had support, wide support of continued use of this. Several certifiers commented that a number of operations they certify include L-malic acid on their materials list used in the production of wine, juices, dietary supplements, personal care products.

We had several commenters opposed to the relisting of this, noting that it should be removed and then petitioned for inclusion at 205.605(b), or could be listed to 605(a) with an annotation to require nonsynthetic fermentation.

As noted before, however, most, if not all, L-malic acid on the market is produced through this synthetic process.

DR. BRADMAN: Open for discussion. Any comments, concerns, questions about L-malic acid?

Okay. Then I think we can go to a vote

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

so that -- just about to do it. So, the Subcommittee wants to bring a motion to the full Board to remove L-malic acid from 205.605(a) and the National List based on OFPA and the 205.600(b) criteria. So I think, Harriet, we can go to a vote.

CHAIR BEHAR: Okay. We are ready for a vote. And, Asa, you are first.

DR. BRADMAN: Okay. No.

VICE CHAIR ELA: No.

MR. RICE: No.

MS. OAKLEY: No.

MR. BUIE: No.

MS. BAIRD: No.

MR. GREENWOOD: No.

MS. SWAFFAR: No.

MR. CHAPMAN: No.

MS. de LIMA: No.

DR. SEITZ: No.

MR. MORTENSEN: No.

CHAIR BEHAR: Chair votes no.

MR. RICE: That's 13 no, 1 absent. The motion fails.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

DR. BRADMAN: Okay. Our next material are microorganisms. Devon, if you can introduce that.

MR. RICE: Point of order. I think we've got magnesium sulfate.

DR. BRADMAN: Did I skip magnesium sulfate? Oh, sorry. I almost let you off the hook, Scott. So, Devon, if you could introduce magnesium sulfate.

MR. PATTILLO: At Section 205.605(a), the listing is magnesium sulfate, nonsynthetic sources only.

DR. BRADMAN: Okay. Let's open it up to the Board for discussion. I'm sorry. Open it up to Scott to present.

MR. RICE: I'll go ahead and present first. Thank you. Magnesium sulfate has a wide variety of uses in food processing and personal care products. It's used as a firming agent in the production of tofu, also used as a nutrient in salt replacement products, dietary supplements, carbonated beverages, other drinks, and as a

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

fermentation and malting aid in beer, ale, and other malt beverages.

Several mineral forms of magnesium sulfate are recovered from the ground. Magnesium sulfate generally found in nature is in the hydrated form.

Two manufacturers noted their support of this material. In the spring, we received other support in this current period, as well as use as a nutrient vitamin and mineral product.

We had one comment characterizing magnesium sulfate from no synthetic sources as synthetic based upon dehydration and purification reactions and suggesting it be removed and classified as synthetic, and, if supported, repeticioned to 605(b).

DR. BRADMAN: Okay. Done? Thanks. Okay. Now we can open it up for Board discussion for magnesium sulfate. Any comments, questions, discussion?

No? Then let's go straight to a vote. So, the Subcommittee is bringing to the full Board

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

a motion to remove magnesium sulfate from 205.605(a) based on OFPA and the criteria -- and/or -- well, we have C.F.R. 205.600(b) there.

Okay. Harriet.

CHAIR BEHAR: Okay. We will start with Steve this time.

VICE CHAIR ELA: No.

MR. RICE: No.

MS. OAKLEY: No.

MR. BUIE: No.

MS. BAIRD: No.

MR. GREENWOOD: No.

MS. SWAFFAR: No.

MR. CHAPMAN: No.

MS. de LIMA: No.

DR. SEITZ: No.

MR. MORTENSEN: No.

DR. BRADMAN: No.

CHAIR BEHAR: Chair votes no.

MR. RICE: That's 13 no, 1 absent. The motion fails.

DR. BRADMAN: Okay. Now we can shift

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

over to microorganisms. Devon, if you could introduce that material.

MR. PATTILLO: Thanks. Continuing 205.605(a), the listing is for microorganisms: any food-grade bacteria, fungi, and other microorganism.

DR. BRADMAN: Steve.

VICE CHAIR ELA: All right. Again, widespread support for relisting of microorganisms. I mean, the main comment is microorganisms are indispensable in the manufacturer of many organic food products that would be unavailable without their use.

I guess the one comment that we received that the listing is not clear. It's apparent that it's intended to cover those microorganisms present as living organisms in foods such as cheese, yogurt, vinegar, pickles, tempeh, wine, so forth. However, there are other products that are made from, or with the assistance of, microorganisms, and it's not clear whether that listing is intended to cover them. And that could include nutritional

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

yeast, spirulina that have been cultured by microorganisms that are no longer living, or the products of fermentation that have been isolated from the fermentation organisms.

But that is -- so, it's just a comment on the details of the listing, but not a comment that they should not be relisted. So, again, just a broad class that is vital to organic production.

And I would strongly support relisting it, and it would be very awkward if we didn't at this point having just delisted dairy cultures.

(Laughter.)

DR. BRADMAN: Thank you, Steve.
Harriet.

CHAIR BEHAR: Not only are they needed for the production of food, but they add great health benefits to the food, as well. So, it's not only let's just have more food, but let's have some healthy food, too.

DR. BRADMAN: Dave.

MR. MORTENSEN: I just found a two-word addition that could be made to enhance the clarity

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

in the wording of a minor point, but an important point, potentially, since we're lumping cultures in. And that is on the very last page. Can you do that at this point, first off? No. Oh, can't make a change in the wording?

DR. BRADMAN: A change to the motion?

MR. MORTENSEN: Or can you? If you can't, that's fine.

DR. BRADMAN: A change to the motion?

Or a change --

MR. MORTENSEN: No, just there's a statement that reads, "any culture that is genetically modified is disallowed." What I was -- how it should be, in my opinion, worded is, "any culture containing microorganisms that are genetically modified is disallowed."

DR. BRADMAN: So, that's in the narrative?

MR. MORTENSEN: It's in the narrative.

DR. BRADMAN: Okay.

MR. MORTENSEN: I'm just asking, for the record, can that be amended with that minor

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

word change or not?

DR. BRADMAN: The sunset narrative or the motion?

MR. MORTENSEN: Yes, this one. As a written record, I just am asking -- you can't do it? Okay.

CHAIR BEHAR: We might need Paul to let us know if that's considered a substantive change since it's not really part of the motion.

DR. LEWIS: Right. It's not part of the motion. So let's keep the report the way it is.

MR. MORTENSEN: Okay. That's fine.

DR. LEWIS: I think people understand the intent in terms of where we're getting to here.

MR. MORTENSEN: Okay. I guess I did have one other question and just a point of clarification. Tom, you indicated that the annotation in the yeast one, and I was wondering -- I didn't pick up on that. Could you just explain what you meant when you said that before just so I understand? And the point was that maybe we could

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

put the yeast under microbes, microorganisms. And you were saying we probably could but the annotation gets in the way or something.

MR. CHAPMAN: Yeah. There's an annotation on yeast that's very specific, requires sourcing of organic yeasts, despite it being a non-ag ingredient. So, yeast grown on organic substrates, and then there is specific substrates that are prohibited. And I think there's something about smoked yeast for flavoring.

MR. MORTENSEN: Okay.

MR. CHAPMAN: I can look it up, but it will come up later and Steve will address it. So there's some very specific requirements on yeast. None of that exists with the microorganisms.

MR. MORTENSEN: Okay, good. Thank you, Tom.

DR. BRADMAN: Steve.

VICE CHAIR ELA: I do want to say, and I think Dave said it earlier, that this is a class in general that worries me because it is ripe for genetic modification. And I don't want to -- I

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

want to see the program and the Board stay ahead of it and not get backed into a corner, like we did with vaccines, where suddenly you have no other choice but to accept a genetically modified organism.

So I would like to make sure that, as stakeholders, if a product starts being made with genetically modified organisms, that they maintain the nongenetically modified culture for organic use. So I just think that's important to be mindful and thoughtful and pay attention to the class as a whole.

DR. BRADMAN: Tom and then Harriet.

MR. CHAPMAN: Yeah. I just want to point out that excluded methods applies to 605 items. And so that's something that gets verified.

And hopefully, I guess, if there's any difference to that, again, like I said at the very beginning, that would require a petition. And the forum for that petition, or anything like that, would be the NOSB. And so hopefully NOSB stays in front of that.

DR. BRADMAN: Harriet and then Scott.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

CHAIR BEHAR: I just want to say that it's not hypothetical about having genetically engineered microorganisms. They do exist and they are being used in conventional, nonorganic food.

DR. BRADMAN: Any other comments or discussion related to microorganisms? No?

So, the Subcommittee then brings a motion to remove microorganisms from 205.605(a) and the National List based on OFPA and 7 C.F.R. 205.600(b).

So, Harriet, I think we're ready to vote.

CHAIR BEHAR: Okay. We will go to a vote, starting with Scott.

MR. RICE: No.

MS. OAKLEY: No.

MR. BUIE: No.

MS. BAIRD: No.

MR. GREENWOOD: No.

MS. SWAFFAR: No.

MR. CHAPMAN: No.

MS. de LIMA: No.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

DR. SEITZ: No.

MR. MORTENSEN: No.

DR. BRADMAN: No.

VICE CHAIR ELA: No.

CHAIR BEHAR: Chair votes no.

MR. RICE: That's 13 no, 1 absent. The motion fails.

DR. BRADMAN: Okay. Our next substance is perlite. Devon, if you could introduce that.

MR. PATTILLO: At Section 205.605(a), the listing is perlite, for use only as a filter aid in food processing.

DR. BRADMAN: Thank you. Scott.

MR. RICE: Thanks. Perlite is used as a filter aid in food processing such as filtration of juices, beer, wine, and vegetable oils. It's an amorphous volcanic glass that occurs naturally, sourced primarily from mines in the U.S., Greece, Turkey, and China.

The listing of perlite has been consistently supported by the Board and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

stakeholders. There has been some concern with potential human health hazard of inhalation of fine silica dust. However, the use of personal protective equipment minimizes such risk.

In this round of comments, we continue to have support for this, with a number of operations listing this on their organic system plans and called out specifically as an essential filtering aid for fruit concentrates.

DR. BRADMAN: Opening this up for discussion, comment. Lisa.

MS. de LIMA: I just want to add it's also used to filter wine.

MR. RICE: Good point.

DR. BRADMAN: Any other comments, concerns, discussion for perlite?

No? Then the Subcommittee then brings a motion to the Board to remove perlite from 205.605(a) of the National List based on OFPA and 7 C.F.R. 205.600(b).

Harriet, I think we can vote.

CHAIR BEHAR: We move to a vote

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

starting, with Emily.

MS. OAKLEY: No.

MR. BUIE: No.

MS. BAIRD: No.

MR. GREENWOOD: No.

MS. SWAFFAR: No.

MR. CHAPMAN: No.

MS. de LIMA: No.

DR. SEITZ: No.

MR. MORTENSEN: No.

DR. BRADMAN: No.

VICE CHAIR ELA: No.

MR. RICE: No.

CHAIR BEHAR: Chair votes no.

MR. RICE: That's 13 no, 1 absent. The motion fails.

DR. BRADMAN: Our next substance is potassium iodide. And, Devon, if you can introduce that.

MR. PATTILLO: At Section 205.605(a), the listing is potassium iodide.

DR. BRADMAN: Okay. So Tom.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. CHAPMAN: So, again, on this item, public comment at the fall mimicked public comment at the spring. Potassium iodide is used for iodine supplementation to address iodine deficiencies and potentially used as a sanitizer. From public comment, it looks like it's primary used in the industry for the supplement side.

We received comments in support from various industry manufacturers, including dairy and infant formulas. The trade association -- multiple trade associations commented about their members' usage. We did receive a comment from an interest group that recommended that its usage be restricted to only when required by law.

DR. BRADMAN: Opening it up for discussion, comment. No? Concerns?

Okay. And then I think we can bring a motion to the Board. So, the Subcommittee brings a motion to the full Board to remove potassium iodide from 205.605(a) in the National List following criteria in 7 C.F.R. 205.600(b). And I think we're ready to vote.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

CHAIR BEHAR: This time we start with Jesse.

MR. BUIE: No.

MS. BAIRD: No.

MR. GREENWOOD: No.

MS. SWAFFAR: No.

MR. CHAPMAN: No.

MS. de LIMA: No.

DR. SEITZ: No.

MR. MORTENSEN: No.

DR. BRADMAN: No.

VICE CHAIR ELA: No.

MR. RICE: No.

MS. OAKLEY: No.

CHAIR BEHAR: Chair votes no.

MR. RICE: That's 13 no, 1 absent. The motion fails.

DR. BRADMAN: Okay. Devon, if you could introduce yeast for us.

MR. PATTILLO: Thanks, Asa. The listing at 205.605(a) is yeast when used as food or a fermentation agent in products labeled as

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

organic. Yeast must be organic if its end use is for human consumption. Nonorganic yeast may be used when organic yeast is not commercially available. Growth on petrochemical substrate and sulfite waste liquor is prohibited. For smoked yeast, nonsynthetic smoke flavoring process must be documented.

DR. BRADMAN: Okay. Steve.

VICE CHAIR ELA: All right. Surprise, yeast is a microorganism that is commonly used for fermentation, baking, food flavors, adding nutritional value and providing health benefits.

There's, again, widespread support. It's very critical for the organic industry. Organic yeast options are available, but they're not always in the appropriate quantity. And even when organic yeast is commercially available, the quality can vary. Since the yeast are very specific for what they're used for, they have functional requirements regarding flavor.

And so the upshot is organic yeast, while available, it's not always available in the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

correct quantities and often does not exhibit the correct properties for consistent application, Thus, the listing.

The other thing is there are many ancillary substances added to yeast. There's a list in the write-up. So, that's just one of those things we continue to monitor.

DR. BRADMAN: Okay. Opening it up for discussion. Tom and then Harriet.

MR. CHAPMAN: Just on this one where commercial availability has been added in on it, you know, there's a lot of comments received about 606 and other handling materials and commercial availability and the need to remove materials before we push industry to produce organic versions of them.

And I think this is a case that shows that that argument is not true. As a super-nano or nano-nano-brewer, 15 years ago finding organic yeast was nonexistent. And now brewers, at least on the brewery side, there's whole companies dedicated to producing only organic yeasts in

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

various formats. They certainly don't cover the breadth of all the types of yeast used in the brewing world, but they cover quite a few. And the size of that market has grown significantly to where I, as a home brewer now, can easily source organic yeast. So I do think commercial availability can be quite effective at moving the dial towards organic.

DR. BRADMAN: Harriet.

CHAIR BEHAR: So, for another trip down memory lane, I remember when Grace Marroquin and Dick Siegel fought for years to get this on the National List. And there was a lot of discussion.

Is it really agricultural? Can it be considered commercially available? And it's just an example of the tenacity of the organic community, as well as our openness to view all kinds of life forms as agricultural.

DR. BRADMAN: Steve.

VICE CHAIR ELA: And I would put forth the argument this whole category really should carry this kind of annotation. It's not -- I mean,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

I would almost be interested in having that at the very top saying, you know, it has to be documented for no commercial availability. Because, I mean, as Tom says, the whole point of this category is a stepping stone, or it should be in most cases.

And I don't know. I mean, does yeast have this annotation? I think it is the stepping stone in the right direction. And I think all these other ones -- I mean, some may not be able to be organically produced, like calcium citrate or some of those. But, I mean, all the microorganisms certainly could be. That's my two cents.

DR. BRADMAN: Any more discussion, comment?

No? Okay. Then let's bring this to vote. So, the Subcommittee brings a motion to remove yeast from 205.605(a) of the National List based on OFPA and 7 C.F.R. 205.600(b). So, Harriet.

CHAIR BEHAR: We start the vote with Sue.

MS. BAIRD: No.

MR. GREENWOOD: No.

MS. SWAFFAR: No.

MR. CHAPMAN: No.

MS. de LIMA: No.

DR. SEITZ: No.

MR. MORTENSEN: No.

DR. BRADMAN: No.

VICE CHAIR ELA: No.

MR. RICE: No.

MS. OAKLEY: No.

MR. BUIE: No.

CHAIR BEHAR: Chair votes no.

MR. RICE: That's 13 no, 1 absent. The motion fails.

DR. BRADMAN: Thank you. And now, Devon, if you could introduce activated charcoal.

MR. PATTILLO: Thanks, Asa. We're now moving into the synthetic substances included in Section 205.605(b). And the first listing is activated charcoal, CAS No. 7440-44-0; 64365-11-3, only for vegetative sources, for use only as filtering aid.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

DR. BRADMAN: Thank you. So, Scott, you're onboard for activated charcoal.

MR. RICE: Thank you. Activated charcoal is used in processing as mechanical filtration involving the physical separation of suspended solids from a liquid passing through carbon arrayed as a porous media in a column or bed.

Activated charcoal of vegetative origin can be made from a large variety of sources, such as hardwoods, grain hulls, corn cobs, and nut shells. It undergoes pyrolysis at a very high heat. These agricultural byproducts may be chemically activated using a variety of acids and bases. Charcoal may also be activated through exposure to oxygenated gas or steam.

We, in both spring and fall, had continued support for this being relisted, with a number of operations listing it on their organic system plans for the filtration of wine and spirits.

We had one organization support it but with a few restrictions: limiting its use to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

filtering water and requiring the steam activation versus the chemical activation. And that is the review.

DR. BRADMAN: Thank you. Comments, concerns, discussion for activated charcoal?

No? Okay. Then let's bring this to a vote. So, the Subcommittee brings a motion to remove activated charcoal from 205.605(b) and the National List based on OFPA and 7 C.F.R. 205.600(b).

Harriet.

CHAIR BEHAR: We will begin the vote with Rick.

MR. GREENWOOD: No.

MS. SWAFFAR: Sorry. No.

MR. CHAPMAN: No.

MS. de LIMA: No.

MR. MORTENSEN: No.

DR. BRADMAN: No.

VICE CHAIR ELA: No.

MR. RICE: No.

MS. OAKLEY: No.

MR. BUIE: No.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. BAIRD: No.

CHAIR BEHAR: Chair votes no.

MR. RICE: That's 13 no, 1 absent. The motion fails.

DR. SEITZ: Oh, no.

MR. RICE: Sorry about that.

CHAIR BEHAR: You were just correct now. He put in his no vote.

MR. RICE: So, just to be sure, that was 13 no, 1 absent. The motion fails.

DR. BRADMAN: Thank you. Devon, if you could introduce alginic acid.

MR. PATTILLO: Continuing Section 205.605(b) of the listing is alginic acid, CAS No. 9005-32-7.

DR. BRADMAN: Lisa, thank you.

MS. de LIMA: Alginic acid is derived from brown cold water seaweed. It's manufactured through a chemical separation process that includes maceration, alkali treatment, and acid precipitation of alginic seaweed from brown seaweed -- or alginic acid rather.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

The FDA allowed uses include as an emulsifier, formulation aid, stabilizer, and thickener, and its use is limited to soup and soup mixes.

We received no public comment from producers using alginic acid, and there were no reports from certifiers of it being included on any OSPs. One interest group asked that the list be reviewed within -- or the listing be reviewed within the broader context of marine materials and to consider adding an annotation related to harvest restrictions and risk based testing for toxic materials.

The TR -- well, I want to point out that the TR reported no residues of heavy metals in excess of FDA tolerances. There were a couple of other commenters that thought that it should be delisted due to lack of essentiality and environment impacts of seaweed cultivation.

In regards to seaweed harvesting, the TR reported that the majority of brown seaweed species harvested for production of alginic acid

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

are wild harvested. However, in countries like China and Japan, large scale production does exist and can affect coastal waterways.

So at the spring meeting, we asked that the community respond if they're using alginic acid to provide us public comment in advance of this meeting, especially because the TR pointed out that there were possible alternatives like agar-agar, carrageenan, gellan gum and xanthan gum.

And it would've been helpful to hear from users if they had tried using alternatives.

And if alginic acid was preferable, why that was.

But like I said, we didn't end up getting any public comment from producers. And in Subcommittee, we did vote five in favor of removing and two were absent.

DR. BRADMAN: So open for discussion.

Tom and then did I see a hand over here? No?
Tom.

MR. CHAPMAN: There were two comments or maybe one comment since I think it's the same communication company. But Kellan, IFAC, the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Association of Dressings and Sauces -- IFAC and Association of Dressings and Sauces at least spoke to wanting its maintenance.

MS. de LIMA: Correct. They spoke in -- oh, sorry. Can I?

MR. CHAPMAN: Yeah.

DR. BRADMAN: Lisa.

MS. de LIMA: They spoken in favor --

MR. CHAPMAN: I see.

MS. de LIMA: -- of relisting. But they didn't point out that there was anyone actually using it.

DR. BRADMAN: Any other discussion?

MR. CHAPMAN: I wasn't present for the Subcommittee. I'm one of the two absent. So if we are going to vote to remove this, I'd like to hear a little bit more from the other Subcommittee members on the discussion that occurred and the reasoning behind just so we get that out there on the record.

DR. BRADMAN: Then Lisa.

VICE CHAIR ELA: Go ahead, Lisa. It

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

came down to essentiality. I felt like there just wasn't much argument that it was needed for me. So I guess I tend to like to see somebody say, this is important to me. And if I don't see any comments, especially after two rounds, that has bearing to me. So that, for me, is the main -- probably one of the main reasons.

DR. BRADMAN: Lisa.

MS. de LIMA: I think this is our second time voting on it. And the first time around, it was the same level of silence and we didn't get anyone.

DR. BRADMAN: Ashley, you look like you're -- Emily, thank you.

MS. OAKLEY: Yeah, I think having two recent rounds without public comment of use is a really compelling reason and demonstrates sound judgment by the Subcommittee.

DR. BRADMAN: Tom.

MR. CHAPMAN: Yeah, I just have one small nit-picky point. But I imagine our recommendations over the years are littered with

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

the same mistakes. I don't think it matters all that much.

But the reason cited was essentiality, and essentiality is a criteria that's applicable to adjuvants and processing aids which this does not appear to be either of those. So necessity should technically be the one that we're citing here. But not a reason to stop moving forward because I assume that's littered throughout historical ones as well.

MS. de LIMA: I'd say that I'd correct that next time, but this is my last go at it.

(Laughter.)

DR. BRADMAN: Thank you, Tom. We're going to miss your encyclopedic knowledge. Ashley, were you going to say something?

MS. SWAFFAR: Yeah. So I do. I think in the handling side of a manufacturer because this is only for soup and you would assume that those manufacturers are highly plugged into this. But I just want to caution us of saying that just because we don't hear from someone doesn't mean everyone

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

knows that this process is happening.

I know I feel that way on the livestock side a lot. Like, say, chlorine, for instance, a lot of people use that. But we don't hear from that many people. So I just want to caution us on using that as a justification always.

But I mean, I feel like the larger soup manufacturers would probably notice this, that we are talking about this. And this is the second time the three of us have went through this and not heard anything. So I do feel comfortable taking this off, but I just want to caution that rationale in going forward.

DR. BRADMAN: Emily then Steve.

MS. OAKLEY: Thanks for your clarification, Tom. And I think just to back up what Ashley is saying. I think in the absence of hearing from manufacturers of soup that this is a necessary material and there are so many organic soups on the market, I think this is a safe conclusion that the Subcommittee has come to.

DR. BRADMAN: Steve.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

VICE CHAIR ELA: I assume you'll put necessity in the cover letter. And I agree with that cautionary principle, Ashley. But I still feel like you need to pay attention. And the other thing is they do get one more shot when it goes to rulemaking.

So maybe if somebody really is using it, Paul will hear about it. And we know from experience that necessity and economic harm might be a reason for it to be not delisted. So I don't feel like this is the final shot for them, but maybe it's a wake up call if nothing else.

DR. LEWIS: Thanks for sharing that in terms of from the Program perspective if we look at the recommendation and if we go in terms of rulemaking, there is an opportunity again for the public to weigh in on this.

DR. BRADMAN: Harriet.

CHAIR BEHAR: There's so many things to look at, I can't remember. Was there anything listed like OTA or CCOF or some of the other certifiers --

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. de LIMA: No.

MR. CHAPMAN: No, the only two comments were --

CHAIR BEHAR: -- mentioning anybody using it?

MR. CHAPMAN: -- Association of Dressings and Sauces and IFAC, the International Food Additives Council.

(Simultaneous speaking.)

CHAIR BEHAR: So it wasn't any actual certifier or --

MR. CHAPMAN: No, no. When you --

CHAIR BEHAR: -- organic organization listed?

MR. CHAPMAN: -- look at the petition database, this is a 95 item again and there's no petition that's available anymore. So it's hard to tell who and where this originated, if it was ever used.

DR. BRADMAN: Emily.

CHAIR BEHAR: Because those are -- just for the public, those are very helpful to us because

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

they can then reach and see what's out in the organic system plan.

MR. CHAPMAN: Yeah. The one point -- Steve makes a really good point about there's another shot at this. I guess I just want to make sure it's clear to the Program that we did consider the comments from IFAC and ADS as we're making this decision. So I'd hope that they would keep that in mind that that's been considered. So additional comments outside of those would be what would need to be considered.

DR. BRADMAN: Emily and then Scott.

MS. OAKLEY: I just thought that in some of the comment -- or the stakeholder surveys to their stakeholders like OTA and others, they had zero respondents using this. So I think that there was an attempt by stakeholders to reach out to the community, but no one was using it.

DR. BRADMAN: Scott.

MR. RICE: I just want to make a comment. So the inverse of encouragement to weigh in, in support of it not being renewed as well

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

because we've seen the importance of that, so --

DR. BRADMAN: I think we're at a point where we can close discussion. So let's move to our motion to the full Board from the Subcommittee to remove alginic acid based on OFPA and/or 205.605(b). And maybe -- well, it says essentiality. I think that necessity is the appropriate term here. But as listed, it's essentiality.

CHAIR BEHAR: I suppose in the cover sheet, we could mention to change it to necessity.

DR. BRADMAN: Yeah. So Harriet --

CHAIR BEHAR: Okay.

DR. BRADMAN: -- let's go to a vote.

CHAIR BEHAR: Okay. We are starting the circle again. Ashley.

MS. SWAFFAR: Yes.

MR. CHAPMAN: Yes.

MS. de LIMA: Yes.

DR. SEITZ: Yes.

MR. MORTENSEN: Yes.

DR. BRADMAN: Yes.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

VICE CHAIR ELA: Yes.

MR. RICE: Yes.

MS. OAKLEY: Yes.

MR. BUIE: Yes.

MS. BAIRD: Yes.

MR. GREENWOOD: Yes.

CHAIR BEHAR: Chair votes yes.

MR. RICE: That's 13 yes, 1 absent.

The motion passes.

DR. BRADMAN: Okay. Devon, if you could introduce ascorbic acid.

MR. PATTILLO: Thanks, Asa. At Section 205.605(b), the listing is ascorbic acid.

DR. BRADMAN: Scott.

MR. RICE: Thanks, Asa. Ascorbic acid is used as a dietary supplement and nutrient flavor ingredient used -- a supplement and nutrient flavor ingredient used in meat and meat containing products, curing and pickling, in flour to improve baking quality as an antioxidant in fats and oils and a wide variety of other food processing uses.

It is often added to processed foods

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

for nutritional purposes, and is one of the most common sources of Vitamin C which provides many important biological functions.

Most modern industrial production processes use fermentation with additional biooxidation steps, adding a biocatalyst which eliminates the need for the chemical steps. Despite the use of various microorganisms, for the bulk of the synthesis, the use of acid in the final step of the process results in the substance's classification as synthetic according to the guidelines in NOP Guidance 5033-1.

During the first review, Subcommittee requested additional information on the use of excluded methods on the production of ascorbic acid. In the 2019 technical report, the authors note that the microorganisms employed for the synthesis of ascorbic acid are not genetically modified.

One interest group noted the predominate use of ascorbic acid is to fortify processed foods to pre-processing Vitamin C levels.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Subcommittee notes that evaluation criteria at 205.600(b) restricting the material's use as a preservative or its use to recreate or improve flavors, colors, textures, or nutritive value lost during processing is limited to processing aids and adjuvants of which this is not.

Public comment reflected much of what we heard in the spring with a number of operations listing this on their organic systems plan, used by beverage manufacturers, wineries, bakeries, dietary supplement manufacturers, and others for a variety of uses. And that is the review.

DR. BRADMAN: Okay. Thank you. Comments, discussion, concerns? No? Okay.

I think we can then go to our motion to remove ascorbic acid from 205.605(b) of the National List following criteria in OFPA and 7 C.F.R. 205.600(b). So Harriet.

CHAIR BEHAR: So we move to a vote. Tom is first.

MR. CHAPMAN: No.

MS. de LIMA: No.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

DR. SEITZ: No.

MR. MORTENSEN: No.

DR. BRADMAN: No.

VICE CHAIR ELA: No.

MR. RICE: No.

MS. OAKLEY: No.

MR. BUIE: No.

MS. BAIRD: No.

MR. GREENWOOD: No.

MS. SWAFFAR: No.

CHAIR BEHAR: Chair votes no.

MR. RICE: That's 13 no, 1 absent. The motion fails.

DR. BRADMAN: Devon, if you could introduce calcium citrate.

MR. PATTILLO: Thanks. At 205.605(b), the listing is calcium citrate.

DR. BRADMAN: Lisa.

MS. de LIMA: So calcium citrate is a calcium salt of citric acid and it's prepared by neutralizing citric acid and calcium hydroxide or calcium carbonate and subsequent crystallization.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

A public comment was supportive and mentioned uses including fortifying nutritional supplements with calcium, that it's used in fruit fillings to thicken and stabilize gel structures, and as a buffer in fruit and flavor preps. No new information was brought forward in terms of harm to human health or the environment.

DR. BRADMAN: Thank you. Opening for discussion. Any comments, concerns, discussion related to calcium -- is it citrate or citrate? Okay. Thank you. Dan.

DR. SEITZ: A question. I noticed on the sheet that two people abstained from the vote. So I was wondering if there were concerns about this substance.

DR. BRADMAN: Tom.

DR. SEITZ: There were two -- I think there was --

MR. CHAPMAN: I think they're absent. They might be -- and I see it listed as abstained. But I think this was same meeting I was not at. Do people remember it any differently?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. de LIMA: No, we didn't have any conversation with anyone abstaining.

MS. SWAFFAR: In the documents in the book, it says absent in the sheet that was provided to us. So I think maybe the PowerPoint might be wrong.

MR. CHAPMAN: Oh, okay.

DR. BRADMAN: Tom, did you want to say anything else? No? Okay. Emily.

MS. OAKLEY: Maybe we can just go back to the subcommittee notes for that meeting and just make the correction in the final document.

DR. BRADMAN: Yes, that sounds good. So at this point then, I think we can go to a vote to the full Board.

So we're going to bring a motion to remove calcium citrate based on the following criteria in OFPA and/or 7 C.F.R. 205.605(b). Harriet.

CHAIR BEHAR: We will start with Lisa.

MS. de LIMA: No.

DR. SEITZ: No.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. MORTENSEN: No.

DR. BRADMAN: No.

VICE CHAIR ELA: No.

MR. RICE: No.

MS. OAKLEY: No.

MR. BUIE: No.

MS. BAIRD: No.

MR. GREENWOOD: No.

MS. SWAFFAR: No.

MR. CHAPMAN: No.

CHAIR BEHAR: Chair votes no.

MR. RICE: That's 13 no, 1 absent. The motion fails.

DR. BRADMAN: Devon, if you could introduce ferrous sulfate.

MR. PATTILLO: The next listing is also at 205.605(b) for ferrous sulfate for iron enrichment or fortification of foods when required by regulation or recommended, parentheses, independent organization.

DR. BRADMAN: Tom.

MR. CHAPMAN: Ferrous sulfate is

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

commonly added to flours and cereal products to make the optional enriched flour claims. And so you'll also find it in baked products and infant snacks. It's also commonly used in infant oat cereals, in teething biscuits. Its usage is to address iron deficiencies which can lead to a wholesale list of health issues, population-based iron deficiencies.

The public comment this round, again, mirrored public comment received in the spring. We received support from various -- a few companies and from the trade association mentioning its usage. There was one comment from an interest group mentioning that this is covered under nutrient vitamins and minerals and questioning whether this was the most effective form of iron supplementation.

DR. BRADMAN: Thank you, Tom. Discussion, comments, concerns? Dan. Okay. Any comments, concerns, discussion for ferrous sulfate? No?

Then I think we can go to our motion

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

to remove ferrous sulfate from 205.605(b) of the National List based on OFPA and/or 7 C.F.R. 205.600(b). Harriet.

CHAIR BEHAR: Okay. We start with Dan.

DR. SEITZ: No.

MR. MORTENSEN: No.

DR. BRADMAN: No.

VICE CHAIR ELA: No.

MR. RICE: No.

MS. OAKLEY: No.

MR. BUIE: No.

MS. BAIRD: No.

MR. GREENWOOD: No.

MS. SWAFFAR: No.

MR. CHAPMAN: No.

MS. de LIMA: No.

CHAIR BEHAR: Chair votes no.

MR. RICE: That's 13 no, 1 absent. The motion fails.

DR. BRADMAN: Devon, if you can introduce hydrogen peroxide.

MR. PATTILLO: Moving right along. At

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Section 205.605(b), the listing is hydrogen peroxide.

DR. BRADMAN: Thank you. I'm going to call on myself for this one. So hydrogen peroxide is a very simple molecule. Most of us are familiar with H₂O₂.

It's a strong oxidizer like many other sanitizers, and it's an effective microbial pest control in a number of different settings, disinfectant, sanitizer, used in a variety of settings within organic. Internationally, it's accepted and used widely.

Like any sanitizer with an oxidizing mechanism of action, there's certain health risks associated with it. It's potentially corrosive, causes eye damage, respiratory problems. Relative to many other sanitizers, though, handled properly, it has relatively low persistence and no long-term impact on the environment and breaks down into benign breakdown products. Hydrogen peroxide, I should say everyone loves hydrogen peroxide. There's extensive comments on it and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

everyone supports relisting it as really an essential tool.

So that completes my introduction; opening up for discussion, concerns, comments? No? Then let's go to a vote and bring a motion to the full Board to remove hydrogen peroxide from 205.605(b) of the National List following OFPA and/or 7 C.F.R. 205.600(b). Harriet.

CHAIR BEHAR: We will start the vote with Dave.

MR. MORTENSEN: No.

DR. BRADMAN: No.

VICE CHAIR ELA: No.

MR. RICE: No.

MS. OAKLEY: No.

MR. BUIE: No.

MS. BAIRD: No.

MR. GREENWOOD: No.

MS. SWAFFAR: No.

MR. CHAPMAN: No.

MS. de LIMA: No.

DR. SEITZ: No.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

CHAIR BEHAR: Chair votes no.

MR. RICE: That's 13 no, 1 absent. The motion fails. And I also want to just add I checked the notes from the May 21st handling meeting and it was two absent and not two abstained if that helps people feel more comfortable.

DR. BRADMAN: Thank you very much. Devon, if you could introduce nutrient vitamins and minerals.

MR. PATTILLO: Thanks, Asa. At 205.605(b), the listing is nutrient vitamins and minerals, in accordance with 21 C.F.R. Section 104.20, nutritional quality guidelines for foods.

DR. BRADMAN: Tom, if you could introduce your review.

MR. CHAPMAN: Nutrient vitamins and minerals are used to recreate or add nutritional content to foods. This is a categorical listing and encompasses a large number of products.

Public comment on this came from several sources but mimicked again public comment received in the spring. And that mimicked public comment

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

in 2015. Comments came from interest groups, industry, consultants, and certifiers.

From industry and certifiers, it's clear that it has wide usage throughout the industry from interest groups and somewhat shared with certifiers as well as the trade association. I'm just going to list out kind of the outstanding concerns that have been present for several years on the side of now.

There's general objections to it being a categorical listing. And some commenters have asked that only specific vitamins and nutrients should be listed individually. There are several already. We've already voted on several of those.

And that generally, vitamins and minerals should be restricted to places where it's required by law. There are very few -- just as a note, this is in the report or the writeup. There are very few instances where nutrients are required by law.

There's also comments around the missed citation to a regulation managed by the FDA and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

that that needs to be fixed. And related to that is a lot of comments related to moving forward with the 2020 previous recommendation of the NOSB that has basically stalled out. And that's wrapped up with a request that there's just clarity in this that's easily enforceable by certifiers.

In a nutshell, that's the comments received. I guess we'll open it up for discussion.

DR. BRADMAN: Thank you, Tom. So discussion, comments, concerns about this listing?

Oh, I'm sorry. Dave.

MR. MORTENSEN: Just a point of clarification. I did not know that there were conditions where things were required by law that's entrusting. Tom, I'm just curious, an example of that.

MR. CHAPMAN: Yes, give me half a second.

MR. MORTENSEN: I don't think it relates to this vote, but I just was curious.

MR. CHAPMAN: Yeah, so there's -- as far as I know and this is pulled actually from the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

TR from 2015. But there's three classes of food where it's required by law. And one of those classes is actually, I think, a state-by-state requirement. But infant formulas and margarine are the two where it's clearly required by law. And then milk, Vitamins A and D potential, thought that might be a state-by-state requirement.

There's also a class of foods where it's kind of optional claims. So for example, enriched flours. If you want to make that enriched claim, then you have to --

MR. MORTENSEN: I see.

MR. CHAPMAN: -- put a whole host of fortifications there. But you can make a flour without an enriched claim. And then there's some kind of informal ways of requiring it. So there's several products under the WIC program that will only be covered if they have certain fortifications in them. So it's kind of an informal requirement in those.

DR. BRADMAN: Any more discussion on nutrient vitamins and minerals? Then I think we

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

can take this motion to the full Board to remove nutrient vitamins and minerals from 205.605(b) of the National List based on OFPA and 7 C.F.R. 205.600(b). Harriet.

CHAIR BEHAR: We'll start the meeting with -- I'm sorry -- the voting with Asa.

DR. BRADMAN: No.

VICE CHAIR ELA: No.

MR. RICE: No.

MS. OAKLEY: No.

MR. BUIE: No.

MS. BAIRD: No.

MR. GREENWOOD: No.

MS. SWAFFAR: No.

MR. CHAPMAN: No.

MS. de LIMA: No.

DR. SEITZ: No.

MR. MORTENSEN: No.

CHAIR BEHAR: Chair votes no.

MR. RICE: That's 13 no, 1 absent. The motion fails.

DR. BRADMAN: Devon, if you could

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

introduce peracetic acid.

MR. PATTILLO: Thanks, Asa. At Section 205.605(b), the listing is peracetic acid/peroxyacetic acid, CAS No. 79-21-0 for use in wash and rinse water according to FDA limitations, for use as a sanitizer on food contact surfaces.

DR. BRADMAN: Thank you. I'm going to call on myself again. So peracetic acid is another oxidizing sanitizer. It's currently used in organic handling in wash water and rinse water including post-harvest handling, disinfect organically produced agricultural products, sanitize food contact surfaces, dairy process equipment. Basically a number of all-around uses related to sanitation and disinfection and pathogen control.

Peracetic acid, like hydrogen peroxide, is widely used and widely supported in the community. Really there were no concerns about relisting -- well, I shouldn't say no concerns. There were no objections to relisting this

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

material.

One thing that was brought up in prior reviews and is in our review and also mentioned in some comments related to the use of additives including HEDP and dipicolinic acid as perhaps inerts or ancillary products. And there were some comments about the legitimacy of that and the reference to list three inerts and also just the general issue of inerts with regard to this material.

And in our review and in those comments, there's general agreement that only products with allowable inert ingredients should be use and also I think underscores a little bit that we need to spend more time on inerts and defining what are allowable.

But with that, we should open it up for discussion. Any comments or concerns about peracetic acid? No? Am I seeing everyone? Okay.

Then let's take it to a vote with a motion to remove peracetic acid from 205.605(b) of the National List based on OFPA and 205.600(b).

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Harriet.

CHAIR BEHAR: We will start the voting
with Steve.

VICE CHAIR ELA: No.

MR. RICE: No.

MS. OAKLEY: No.

MR. BUIE: No.

MS. BAIRD: No.

MR. GREENWOOD: No.

MS. SWAFFAR: No.

MR. CHAPMAN: No.

MS. de LIMA: No.

DR. SEITZ: No.

MR. MORTENSEN: No.

DR. BRADMAN: no.

CHAIR BEHAR: Chair votes no.

MR. RICE: That's 13 no, 1 absent. The
motion fails.

MR. CHAPMAN: Can I make a point of
clarification, something that --

DR. BRADMAN: Sure.

MR. CHAPMAN: -- I think we forgot to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

do. We voted two items off, dairy cultures and alginic acid. Both of those were sunset reorganization items. So as part of the -- I think part of the policy is that they would stay on the list through their full listing and then the recommendation for sunset would go -- or the sunset date would be based off of the last renewal. So five years from when it was last renewed, not immediately from this time.

DR. BRADMAN: Right. It would be based on -- the cover letter would be from the end of the sunset period.

MR. CHAPMAN: Correct, yeah. It's just one of the pull-forward items. And the pull-forward items had a special time periods, kind of, of protected status even if we were voting them off.

DR. BRADMAN: Right. Is that an issue --

MR. CHAPMAN: I just want to call that out on those. We normally --

DR. BRADMAN: -- of the Program or for

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

--

MR. CHAPMAN: On the pull-forward ones, we normally call that out when they get voted off. And we just didn't do it on these two.

DR. BRADMAN: We call it out in the dialogue?

MR. CHAPMAN: Uh-huh.

DR. BRADMAN: Got it.

MR. CHAPMAN: Yeah.

DR. BRADMAN: Okay.

MR. CHAPMAN: So this is the last meeting we'll ever have to do that, so --

DR. BRADMAN: Okay.

CHAIR BEHAR: And I'm sure Paul is all over it.

DR. LEWIS: Yes, we're aware in terms of when a recommendation is divided, obviously it doesn't mean it goes off immediately. So yes, we handle it.

DR. BRADMAN: And Tom, with that comment, your voice will be here behind us to keep us on track of that process. So Devon, if you could

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

introduce potassium citrate.

MR. PATTILLO: Thanks. At Section 205.605(b), still the listing is potassium citrate.

DR. BRADMAN: Lisa.

MS. de LIMA: So potassium citrate is the potassium salt of citric acid. It's prepared by neutralizing citric acid with potassium hydroxide or potassium carbonate and its subsequent crystallization.

Public comment was supported and mentioned uses including buffer and pH control agent, acidity regulator in the wine making process. And the TR also stated that it could be used to wash processing equipment to remove all flavors.

There was no new information brought forward in terms of harm to human health or the environment. And this is another one where I believe it's a typo. It says we voted four no and three abstained in Subcommittee. But I'm pretty sure those were three absent.

DR. BRADMAN: Yes, I think that's

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

correct and consistent with peracetic acid where we had three absent. So thank you for that review.

Opening up for discussion, comments, concerns on potassium citrate. No? Okay.

Then let's take this to a vote and we'll make a motion to the full Board to remove potassium citrate based on OFPA and 205.605(b). Harriet.

CHAIR BEHAR: We will start the voting with Scott.

MR. RICE: No.

MS. OAKLEY: No.

MR. BUIE: No.

MS. BAIRD: No.

MR. GREENWOOD: No.

MS. SWAFFAR: No.

MR. CHAPMAN: No.

MS. de LIMA: No.

DR. SEITZ: No.

MR. MORTENSEN: No.

DR. BRADMAN: No.

VICE CHAIR ELA: No.

CHAIR BEHAR: Chair votes no.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. RICE: That's 13 no, 1 absent. The motion fails.

DR. BRADMAN: Thank you. And Devon, if you could introduce potassium phosphate.

MR. PATTILLO: Thanks, Asa. At Section 205.605(b), the listing is potassium phosphate for use only in agricultural products labeled made with organic specific ingredients or food groups, prohibited in agricultural products labeled organic.

DR. BRADMAN: Thank you. Tom.

MR. CHAPMAN: Potassium phosphate is used in dairy products to control pH and for milk protein stabilization. It's also nutrient additive and a source of potassium. It can be used also in meat applications and liquid eggs.

We received comments from industry and trade associations, mostly in the dairy and infant food space and enteral formula space speaking to its necessity.

There was also comments from interest groups questioning its necessity, although not

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

offering what would be a wholly natural substitute product. There's also concerns that were raised as they'd been raised previously about the impacts of phosphates in general on human health on an accumulated basis across dietary exposure.

All this information is similar to the information we received the last time this substance was reviewed. I don't think there's any significant new information provided at this time.

DR. BRADMAN: Thank you for that review. Opening it up for discussion. Sue, did I see you raise your hand? Okay. Harriet.

CHAIR BEHAR: Yet another trip down memory lane. When this material was first put on the list, there was a lot of concern about all the phosphates in food and that allowing this would be a slippery slope and open the door to a proliferation of phosphates. And we really have not see that happen. And as an organic inspector, I do see it used fairly widely out there in the world.

DR. BRADMAN: Dan.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

DR. SEITZ: Just a question. When the Subcommittee sees that a substance doesn't appear in the European, Japanese, or IFOAM organic standards, is that something that raises any concern or when we're looking at it as an approved substance? Just curious to know how that piece of information is taken into account.

MR. CHAPMAN: I mean, it's another piece of discussion. There are several ways that our lists differ. For example, we allow celery powder and they allow sodium nitrate. We'll get to that in a second, though. So I don't want to expose too much on that beforehand.

I asked questions of IFAC or someone else last time. We had the questions actually in the spring about why you would see this in products in the U.S. and not products in Europe. And the response back, I believe, if my memory serves me correctly in my old age on this Board, was that the consumer demand differs by region and the products. The kind of milk stabilization products are more in demand in the American markets than

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

you would see in the European market.

DR. BRADMAN: Any other discussion? I think in Subcommittee, there were also some comments about -- concerns about health effects of phosphates and kind of putting it in the category of salt in terms of people need to be aware of it.

And also I think this argues for the importance of eating whole foods. But I'm not sure, as a group, we didn't feel that would take it off the list.

MR. CHAPMAN: Yeah, the issue is the accumulated exposure. It's not a single food's exposure. So it's akin to the salt argument.

In fact, one of the studies that's cited by the folks that raised those concerns kind of makes that recommendation that the solution to this is greater consumer education about phosphates in foods and the labeling, the clear labeling of phosphate levels. I think that was directed at the European community, that study. But that's regulated. The required disclosures of various nutrients is regulated by someone other than us.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

DR. BRADMAN: Any more discussion, comment, concerns? No? Then let's take this to a vote with our motion to remove potassium phosphate from 205.605(b) of the National List based on OFPA and 205.600(b). Harriet.

CHAIR BEHAR: We will start the vote with Emily.

MS. OAKLEY: No.

MR. BUIE: No.

MS. BAIRD: No.

MR. GREENWOOD: No.

MS. SWAFFAR: No.

MR. CHAPMAN: No.

MS. de LIMA: No.

DR. SEITZ: No.

MR. MORTENSEN: No.

DR. BRADMAN: No.

VICE CHAIR ELA: No.

MR. RICE: That's 13 --

CHAIR BEHAR: No, no. You have to vote.

MR. RICE: Oh, excuse me. No.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

CHAIR BEHAR: Chair votes no.

MR. RICE: Minor distraction. Thirteen no, one absent. The motion fails. And again, with the previous material, potassium citrate that was confirmed as three absent and not abstain.

DR. BRADMAN: Devon, if you could introduce sodium acid pyrophosphate.

MR. PATTILLO: Thanks. At Section 205.605(b), the listing is sodium acid pyrophosphate, CAS No. 7758-16-9, for use only as a leavening agent.

DR. BRADMAN: Thank you. Scott, if you could brief us on your review.

MR. RICE: Yeah. Sodium acid pyrophosphate is used as a leavening agent in baked goods where it reacts with baking soda, sodium bicarbonate to liberate carbon dioxide, essentially leavening the dough and creating the desired area texture that consumers expect of baked goods such as cakes and cookies.

Again on sort of the same page as what

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

we were talking about before with phosphorous, the 2016 TR on phosphates included extensive discussion of the impact of phosphorous on the human diet. But due to restrictions on phosphate use in organic foods and our discussion on how this -- the diet based on those foods, an organic diet would reduce the phosphorous intake. An occasional intake was not a concern.

Yeast is a natural leavener that's been used for quite some time and as a common alternative to chemical leavening. However, yeast leavened baked goods have a different physical texture and require more time than chemically leavened foods.

It also imparts a different flavor.

During the first round of comments in spring, a number of food manufacturers and trade groups noted the essentiality of this material as it is the only chemical leavener available to the baking sector. We received notes in this round that echoed those needs with a number of operations listing this on their organic system plan as shared by a couple of certifiers.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

We had one comment believing this to be an artificial ingredient and should be removed and does not believe it is essential. We had another similar comment that it's a synthetic chemical, not essential for processing but again continued to be used and supported by manufacturers in the organic sector.

DR. BRADMAN: Thank you, Scott. I want to open this up for discussion, comment. Harriet.

CHAIR BEHAR: So ditto on my other comment. I don't know how many hundreds of phosphates there are. We don't have that many on our list. And this one helps with making cake doughnuts. And it would've helped with the organic twinkie, but nobody has stepped forward to do that yet.

DR. BRADMAN: Coming from San Francisco, we're scared of twinkies.

(LAUGHTER.)

DR. BRADMAN: And that might be something for the older generation. But if you don't know what I'm talking about, you should look

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

into the history there. Dave. Dave and Dan.

MR. MORTENSEN: I don't know the history of the twinkie in San Francisco, but the vote on this one also indicated four no, one abstained, two absent. Could the rationale underlying an abstention be shared with the group? Is that an accurate vote first?

MR. RICE: I would have to look at that record.

DR. BRADMAN: I don't remember.

MR. RICE: I don't recall either. Does the abstainer recall?

MR. CHAPMAN: I can probably say I was one of the absents, so don't ask me.

(LAUGHTER.)

DR. BRADMAN: Okay. Maybe this was also a four-three absent situation.

VICE CHAIR ELA: I almost want to say it was somebody that got distracted during the discussion and then didn't feel like they could vote. But I'm trying to remember. It could've been --

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. MORTENSEN: I was just curious. One of my hobbies is I like to bake. And to my knowledge, but perhaps it's in something amusing and I don't realize, I don't think I've ever used sodium acid pyrophosphate. Could someone on the Subcommittee, like, help me understand what it is? I didn't do a lot of study on this.

DR. BRADMAN: Scott, can you speak to that or Harriet too?

MR. RICE: Yeah, it's used as an alternative to a natural leavener. Most commonly yeast would be used in something that -- a yeast. A long-raised baked good or in a quick bread, you often baking soda or baking powder.

This is used as an alternative to that for -- as I said at the top, it's kind of a chemical leavener and it's acting more quickly. And it provides a unique texture and character to the baked good.

MR. MORTENSEN: Thank you, Scott.

DR. BRADMAN: Harriet.

CHAIR BEHAR: I think it also results

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

in somewhat of a denser leavening. So things like a cake doughnut or that sort -- waffles, things where you don't want to have too much air in there, pancakes, things like that.

MR. RICE: Perhaps Asa, in the Bay Area, you could make an organic It's-It.

DR. BRADMAN: Yes, that would be another contribution to humanity. Okay. Is there any more comment, discussion on sodium acid pyrophosphate? Then I think we can bring this to a vote.

The motion to remove sodium acid pyrophosphate from 205.605(b) of the National List based on OFPA and 205.600(b). So with that, Harriet, I think we're ready to vote.

CHAIR BEHAR: We are starting with Jesse.

MR. BUIE: No.

MS. BAIRD: No.

MR. GREENWOOD: No.

MS. SWAFFAR: No.

MR. CHAPMAN: No.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. de LIMA: No.

DR. SEITZ: I will say that there should be a number of syllables above which we would not approve a substance. But I'll vote no.

(Laughter.)

MR. MORTENSEN: No.

DR. BRADMAN: No.

VICE CHAIR ELA: No.

MR. RICE: No. And I neglected to add that it's also called SAP if that's helpful, Dan.

(Laughter.)

MS. OAKLEY: No.

CHAIR BEHAR: Chair votes no.

MR. RICE: That's 13 no, 1 absent. The motion fails.

DR. BRADMAN: Devon, if you could introduce sodium citrate.

MR. PATTILLO: Continuing in Section 205.605(b), the listing is sodium citrate.

DR. BRADMAN: Lisa.

MS. de LIMA: So sodium citrate is the sodium salt of citric acid. It's prepared by

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

neutralizing citric acid with sodium hydroxide or sodium carbonate and its subsequent crystallization. Public comment was supportive and mentioned uses including as an antioxidant, a stabilizing salt buffer.

Someone also mentioned that when it's combined with citric acid, the pair provides a tartness without a significant drop in pH which is important for preventing degradation of sucrose in confectionary products. It's also used for achieving a consistent pH for the gelling of pectin.

It's also found in OSBs used for meat processing and in the manufacturing of dietary supplements and personal care products.

No new information was brought forward in terms of harm to human health or the environment.

DR. BRADMAN: Thank you.

MS. de LIMA: Oh, and this is another one where that's a typo and that's not three abstain. That's three absent.

DR. BRADMAN: Thank you for that introduction. Any discussion, concerns, comments

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

on sodium citrate? No? Then let's -- Harriet.

CHAIR BEHAR: In some applications, it can be an alternate to sodium phosphate.

DR. BRADMAN: Any more comments? No? Then let's take this to a vote with a motion to remove sodium citrate based on OFPA and 205.605(b). Harriet.

CHAIR BEHAR: We'll start the vote with Sue.

MS. BAIRD: No.

MR. GREENWOOD: No.

MS. SWAFFAR: No.

MR. CHAPMAN: No.

MS. de LIMA: No.

DR. SEITZ: No.

MR. MORTENSEN: No.

DR. BRADMAN: No.

VICE CHAIR ELA: No.

MR. RICE: No.

MS. OAKLEY: No.

MR. BUIE: No.

CHAIR BEHAR: Chair votes no.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. RICE: That's 13 no, 1 absent. The motion fails.

DR. BRADMAN: Devon, if you could introduce tocopherols.

MR. PATTILLO: At Section 205.605(b), the listing is tocopherols derived from vegetable oil when rosemary extracts are not a suitable alternative.

DR. BRADMAN: Thank you. So I'm the lead on this one. I'll get this a little closer. so tocopherols are currently permitted in handling and processing as an antioxidant ingredient. That's the primary use. They're added to foods to help prevent oxidation of fatty acids, especially when there's lipid components to the food.

Tocopherols are derived from vegetable oil and allowed for uses as ingredients in or on processed products labeled as organic or made with organic when rosemary extracts are not a suitable alternative. So that -- they're talking about complexities. I'll get there in a moment.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

So that's our listing for this material.

If you go through the comments we've had, pretty universally, there's support for relisting of tocopherols as kind of an essential component for preserving or working with foods in developing food products.

There's a fair bit of discussion around -- from one commenter related to whether we should be listing this and using -- let's see -- synthetic.

Right now, it's listed on 205.605(b), synthetics allowed, and whether there are nonsynthetic versions allowed.

We discussed that at the fall 2017 meeting. And at that meeting, we concluded not to move forward on making an annotation change to tocopherol, i.e., probably listing it -- i.e., listing it on 205.605(a) or both 205.605(a) and (b).

But according to many transcripts note if there is sufficient commercial availability of this material in another form, we encourage members of the public or industry to petition the NOSB to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

make this change and we would take it up at that time.

I've done a little homework since preparing this review. I think it's actually possible -- let me step back a moment. Many of the review comments related to this felt that there were not alternative sources available.

But I think it's possible that some of the sources that are being used are possibly nonsynthetic in that some of the companies that are listed on this source here may, in fact, meet the definition of nonsynthetic and may actually even be in use. I've had some review of these and some long discussions with Gay Timmons at Oh, Oh Organic and other people I know in the industry.

I think for this listing today, we're focused really on tocopherols under 605(b). But again, this may be something down the road we might want to come up with this -- reconsider this idea that maybe there are available forms that can be listed on 205.605(a) and maybe be preferred over a synthetic source.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

That's my introduction. I'm expecting Tom to probably have deeper knowledge than I on this. Thank you.

MR. CHAPMAN: Yeah. I mean, the one thing I want to point out is the way we define synthetic and the way the food industry defines synthetic, at least related to this substance, is different. And Vitamin E can be derived from petroleum products, and that's generally what people mean by the synthetic version. The nonsynthetic version is generally one derived from a vegetable oil.

But because of the processing and the extraction method, we consider it synthetic. So there is -- I don't know. This thing is just ripe for confusion basically. And I still if someone has an interest and thinks the nonsynthetic according to us version is commercially available, the petition is a great process to get that reviewed, get it out there, and have the Board address it.

DR. BRADMAN: Right. And I also don't

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

think it'd actually make it different in anyone's market or use of the material. I did review some of the process sheets for one of the companies here, BTSA Tocobiol. And it looks nonsynthetic to me.

But I don't know if I'm the best judge of that.

And these comments also come up in the public comment. But in terms of my vote on this material, I would vote no as we're listing it. So as did the committee as a whole. Any other discussion, comments, concerns?

So let's take this to vote then to remove tocopherols -- I hope I'm saying that right, tocopherols -- from 205.605(b) of the National List based on OFPA and 205.600(b). So Harriet.

CHAIR BEHAR: We will start the voting with Rick.

MR. GREENWOOD: No.

MS. SWAFFAR: No.

MR. CHAPMAN: No.

MS. de LIMA: No.

DR. SEITZ: No.

MR. MORTENSEN: No.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

DR. BRADMAN: No.

VICE CHAIR ELA: No.

MR. RICE: No.

MS. OAKLEY: No.

MR. BUIE: No.

MS. BAIRD: No.

CHAIR BEHAR: Chair votes no.

MR. RICE: That's 13 no, 1 absent. The motion fails.

CHAIR BEHAR: Asa, I just would like to take a little poll here from the Board if it is 5:35. Well, I'm just going to ask if anyone wants to take a break or if we want to push through the remaining six items which might have some discussion, celery powder, fish oil, gelatin, orange pulp dried, and the two seaweeds. Just how do people feel?

MR. CHAPMAN: I vote to power through.

CHAIR BEHAR: You vote what?

DR. BRADMAN: To power through.

MR. CHAPMAN: Power through.

CHAIR BEHAR: To push on --

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. CHAPMAN: Push through.

CHAIR BEHAR: -- through. Anybody else?

MS. OAKLEY: Okay. Then I'll be right back.

CHAIR BEHAR: So if someone needs to -- anybody else? Everybody wants to go for it? Okay. Because we do have a reception at 6:30, so maybe we can keep going here. That's fine with me. Just wanted to make sure everybody was okay. Okay. Asa, you can take over.

DR. BRADMAN: Thank you. Devon, if you could introduce celery powder.

MR. PATTILLO: Thanks. We're now moving to sunset reviews for ingredients in Section 205.606 of the National List. This section in the National List includes nonorganically produced agricultural products allowed as ingredients in or on processed products labeled as organic.

These products may be used only when they are not commercially available in organic form and only in accordance with other restrictions

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

specified in the section. The first product under review is listed at 205.606(c), celery powder.

DR. BRADMAN: Thank you, Devon. So I think there's going to be an opportunity for a lot of discussion about this material. Celery powder is used in meat preservation for processed meat.

It's kind of a natural version of nitrites and nitrates used for curing and preserving meats.

The use of nitrites and nitrates and lactic acid is a pretty old technology. These materials have been used for many, many years to process meats. And really celery powder is kind of a modern incarnation of this.

But using a plant-based source, ideally an agricultural product that is perhaps, I think, perceived as being more natural or consistent with organic philosophies. And also, of course, in our rule setting here, pure nitrates and nitrites are not allowed or used as they are in Europe.

So in terms of manufacturer, we've had a number of discussions on this in the panel last year. The celery is cleaned and basically juiced

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

and then dried. And then depending on the nitrate content of the plant at harvest, hopefully the dried material and powder derived from that will have an adequate level of nitrates and nitrites that can be used for manufacturing purposes.

In terms of human health and the environment, there's -- of course we had our panel session last spring. And it was pretty clear to me that, you know, current use in production of celery powder is dependent on conventional celery production.

We weren't able to get explicit information about agronomic practices and whether excess nitrogen was being applied to celery -- conventional celery stalk or -- I'm missing a word here, like, pre-material -- first material for this. But clearly when we looked at some of the levels of nitrate in the conventional versus organic, although some of the organic levels did approach the levels in conventional that might be useful for celery powder production, in general, there's more variability in lower levels than the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

organic sources.

That kind of -- I summarized some of the discussion that we had last spring, votes from the panel and the public comment. And I think this kind of summarizes the statements we have for this time around too that celery powder remains an essential curing agent for organic cured meats, alternative source material such as Swiss chard or other crops now fill the need.

That reference to alternatives really addresses the use of other vegetable juices that may also be a source of nitrate, not another material. That would be a non-nitrate approach to curing these.

Organic cured meat has been around for some decades and they've been using this material for ages. And it's a big industry that's relied on this. Let's see. And one of the challenges that the industry has faced or celery powder producers was that it's difficult to leverage investment in developing alternatives to the conventional celery because it's a relatively small

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

market for the overall agronomic -- on the agronomic side.

That said, I think some of the attention we paid to this issue in the last few years helped perhaps contribute to recent success with an OREI grant to the University of Wisconsin for two million dollars. That will support research going forward on organic sources of agronomic practices -- organic agronomic practices for celery production that could meet the needs of celery powder production. So that's kind of a step forward.

If we go back to the 2015 review, there was kind of a promise made to look for alternatives.

And this time around, we don't yet have those alternatives in terms of a natural organic source in celery powder. But perhaps the funding of that research will lead to a viable organic source for celery juice and celery powder.

The other issue that's come up and that's always associated with processed meats is the listing of processed meats by IARC as a carcinogen. Relatively weak carcinogen, but it

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

is listed as a carcinogen. That's processed meat, and some of that risk may be associated with use of nitrate and nitrites in the cured meat.

There could be in vivo transformation to nitrosamines and other related compounds that may -- or be carcinogens. And the additional processing of the meat with the nitrates present and proteins and heat may also perhaps facilitate or catalyze formation of some of those potential or actual carcinogens.

So the public comments on this really kind of fall into three categories. One, there's people who support keeping celery powder basically because it is an important tool for making cured meat products, organic cured meat products which are highly valued. Probably all of us consume these or have consumed these.

And that consumers should have choice and freedom to still have their bacon and not necessarily go to the freezer for that. And there's strong argument by producers that without celery powder, a lot of their product would

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

disappear and demand would disappear.

There's another category of comments that address concern about the use of nonorganic source material and would have us take this off the list as an incentive and/or -- as an incentive to move to organic and/or they just feel like it should not be on the list if it's not organic. And that if it was organic, though, they would allow it and leave that kind of consumer choice.

And then we've heard arguments presented yesterday and today and also in the written comments about the fact that, you know, nitrates per se are not necessarily carcinogens.

But they are being used in a process that may be increasing the risk for the finished food product.

And therefore, that is -- essentially, it's a potential stain on the organic brand and raises concerns about that.

So I think I have a long but hopefully relatively complete summary of kind of the issues here. I may be forgetting one thing, and I'll bring it up when it comes to my mind. So I think we can

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

open this for discussion and comment. I see Tom and then Steve. And why don't we start with Tom.

MR. CHAPMAN: Thank you, Asa. That was a really, I think, good and balanced summary of the comments and the issues before us. The one point I just wanted to clarify is in your beginning comments about the production of conventional celery powder, you alluded to -- I mean, it's clear that we don't know what the celery producers are doing because they do not appear to have engaged with the folks that we brought in or are commenting to us and seemed to probably find that their production practices are proprietary.

But they're also alluding to that they might be spiking that production with nitrates to boost the levels. And just with our expert panel, both Dr. Silva commented on trying to in the organic trials manipulate the nitrogen sources from organic sources to try to adjust the output of the crop and that it was too variable to really see any direct correlation between those two.

And then Carrie had mentioned that with

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

a culinary conventional facility grower that they had attempted to spike that with synthetic nitrogen sources and that they also did not see the correlated elevated levels. So that's kind of a theory that we have out there. But --

DR. BRADMAN: Correct.

MR. CHAPMAN: -- I don't think it's been actually corroborated --

DR. BRADMAN: Right.

MR. CHAPMAN: -- by anyone, any grower or any scientific article. But they did see kind of a connection with time. So there's still a lot of, like -- we're still trying to crack the celery nut, if you will, on what -- the celery seed on what they were doing.

DR. BRADMAN: Right. Thank you for that. I think there was a little frustration, though, that -- and I see your comments about the crop. But I think there's a little frustration that no growers did come and say, yes, we do, or, no, we don't.

The other thing I meant to mention about

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

carcinogenicity is that the carcinogenicity of processed meat may also be related to just the cooking process. And in that same review of processed meat, they reviewed red meat. They put red meat as a possible carcinogen, but -- they didn't put it in a higher category.

But in general, cooking meat produces polycyclic aromatic hydrocarbons. And anytime you're putting your food on your grill, whether it was frozen without celery powder or not, you're exposing yourself to significant carcinogens. And that may be part of the risk with processed meat because it's been heat treated. Steve and then Emily and then Harriet. Actually, it's hard for me to see down this way.

VICE CHAIR ELA: No, that's fine.

DR. BRADMAN: Thanks for --

VICE CHAIR ELA: So yeah, I think -- I mean, I thought the panel in the spring kind of sealed the deal in terms of really saying, you know, what are the alternatives. But I also struggle. I mean, this is one we're reviewing celery powder.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

We're not reviewing meats.

And so I mean, and again, this product is used to cure meats. But we're not -- we really need to keep our focus, is this material okay or not? Because once we get organic celery powder, we're still going to have the same problem with the meats.

And so I feel like we're wrapping ourselves in a tailspin of, well, here are all these problems. But organic celery powder is not going to solve that problem either, I don't think. So I'm hoping that that two million dollar grant will help unravel and crack that stalk.

But for now, I'm probably going to vote in favor of relisting because I really don't think there's an alternative. And I think the celery powder itself is not the issue.

DR. BRADMAN: I think Emily, then Harriet, then Rick.

MS. OAKLEY: This is a question for Tom. You mentioned earlier that you thought yeasts were a good example of a material that was on the list

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

but still had organic alternatives. And so one of the -- or some of the comments that we've heard from stakeholders is that by keeping it on 606, we're not incentivizing organic celery powder.

And obviously, we know that there's a tremendous amount of research going on to that effect. But I just wanted to hear your thoughts on this material in particular.

MR. CHAPMAN: Yeah, I mean -- so commercial availability is what I was lauding. And 606 commercial availability applies to it. I think the fact that you saw Kerry Ingredients, the manufacturer of this product, actively spending resources to try to find an organic solution shows that it's working. The solution just hasn't been found yet.

And if you look at the slide, OTA has really gotten on their game with their graphics.

And it was really briefly up there, but theirs, we can go back and find it. OTA has a graphic on the time span to take something through to get, you know, commercialized. And 14 years is kind

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

of the list that they have on there.

So where this didn't become an area of intense focus until 2015. So if you apply that to this material, it's still going to take a lot of time to crack this nut. And unfortunately, conventional growers who are making this product right now are not cooperating with us.

I would hope that they would see the market potential for this product because, I mean, frankly, there's not that many juice manufacturers.

There's not that many cultured powder manufacturers. And there's not that many organic processed meat manufacturers. So it wouldn't be that hard to convince them to switch that product.

It's also such a small, minor portion of their formulations. I don't think it's materially a cost impact to any of those meat manufacturers. That's me projecting an assumption. I didn't ask them any of those questions. So I don't see that as the block.

It's just it technologically hasn't been correct yet. And that's true for some other

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

606 items. But there's hundreds 606 items where organic sources of it has developed over time. Hops was one that was given to us.

We just took off a few years a wholesale list of items, dill weed. I'm blanking on a ton of them now. I'm looking at my older colleagues to remember some of these other ag items that we removed. We removed about a dozen of them just a couple years ago.

So the system works. But some items that have especially technical barriers to it just take longer.

DR. BRADMAN: I would add to that. I'll take my place as the Chair to butt in out of place. Just that I think it's good that there's been a commitment of federal funding to do research on that. So I'm sorry. Harriet and then Rick, I think.

CHAIR BEHAR: Okay. So in one of my day jobs, I work with Dr. Silva at the University of Wisconsin Organic and Sustainable Cropping Systems lab. So I'm very happy, and there was a

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

big email to the group and the team. So we're happy to be able to be working on that.

The petition that's before the FSIS to change the label that even if it's celery powder, it would still then it would have to be called cured meat. The manufacturers would have to deal with that, and that's outside our purview. And they would still have a choice at that time to not use it if they wanted to go to frozen or whatever, if they didn't want to say their meat was cured.

And then the other things is if we voted this down which I am not promoting, it could still be used in a made with organic product. But I just want to say there is that option out there. But it would look a little strange in the marketplace to have bacon made with organic meat because most consumers would think that, well, what else is in the bacon, or whatever.

I mean, the jerky bars and things like that where there could be dried cranberries and all of that, maybe that would make more sense to a consumer, that it's a multi-ingredient product.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

But ham made with organic meat, how does that work?

So I'm very happy to be moving down the path of getting an organic alternative. And I will be voting for this.

DR. BRADMAN: Rick, then Dave, then Emily. Rick, did you -- oh, I thought -- no? Okay.

Then Dave, then Emily, and then -- sorry. Did I miss you guys? Okay. All right. Well, how about Ashley, Lisa. Okay. So Ashley. Oh, will you just try to get in line? Okay. Dave. Great, okay, Dave, speak.

MR. MORTENSEN: Yeah, so I'm going to articulate a different perspective on this that is the view that I come to it with and that is that I'm not personally convinced that it's necessarily in the best interest of the organic community that we need to have parallel foodstuffs. So you think a conventional or regular bacon or organic bacon or whatever, jerky, organic, nonorganic.

And I do have concerns about the intended use of the celery powder. I spent a lot of time with a colleague who's field of study was

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

the influence of different chemicals, not this one in particular, on humans.

And I think we all know what he found about the effect of lead on children and urban environments and that is that children are way more sensitive to most any of these compounds than are adults which raises a significant concern for me.

And I think it was actually highlighted by the fellow that presented about the hot dog thing this morning that the kids were having hot dogs.

And so I'm going to vote not to have this remain on the list because I don't -- it's not consistent with the logic model that's in my mind. And my logic model may not conform to others.

But that's where I'm coming from.

DR. BRADMAN: Emily, Ashley, Lisa, Tom.

MS. SWAFFAR: Thank you for that, Dave.

I was curious about your opinion. And I don't mean to put Dan on the hot seat, but there were a lot of letters from consumers. And so I was wondering if you had a take as a consumer rep on this material.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

DR. SEITZ: I'm actually planning to vote to keep it on the list from the standpoint of it's not our role I feel to necessarily protect the consumer from a choice that may have some adverse effect from a health perspective. And then my own personal philosophy is everyone should have one bad habit that makes them happy.

(Laughter.)

CHAIR BEHAR: This is bacon. Is that your bad habit?

DR. SEITZ: If you count bacon, I have two bad habits.

(Laughter.)

DR. BRADMAN: Okay. So Ashley, Lisa, Tom, Sue, Dave.

MS. SWAFFAR: Great. So I just want to put my support in for celery powder. I want to -- there's no alternative for this right now as we've heard from industry. And I think that they have done a tremendous job hearing us in 2015 or hearing some concern in 2015 that folks don't like celery powder and they wanted them to start

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

researching for an alternative.

And they worked really hard to get that grant. They formed a working group. I think that's a great partnership that they have done. And I just want to say that's wonderful and voice my support because this -- not only is this critical as consumer choice. But it's critical for the livestock industry.

And there is a lot of cuts of meat that go into these hot dogs and some other deli meats.

And I think this could really have a devastating effect. And so I want to voice my support and say this is a 606 item.

So between now and the next sunset process, if somebody comes up with an organic celery powder that works, they have to use it if it's commercially available.

DR. BRADMAN: Lisa.

MS. de LIMA: All right. So there's been a lot said. So agree with and hear what folks are saying, and I just want to point out that from my perspective if processed meats -- organic

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

processed meats were to go away, I don't think all of a sudden all these consumers are going to go vegetarian. They're just going to end up buying some all natural alternative to what they're currently purchasing organically. And that's not something that I can get behind.

CHAIR BEHAR: Probably containing celery powder.

DR. BRADMAN: I think it goes Sue, then back -- okay, Tom.

MR. CHAPMAN: I find it easier to write the list down.

DR. BRADMAN: Okay. Just raise your hand when it's your turn.

(Laughter.)

MR. CHAPMAN: So I do want to point, though, in the Q and A from IARC on their red meat one, there's a question in there about is there a higher risk to children, elderly, women, or men? And they note that there's not data available to make any conclusions to that.

As a father of a young child who eats

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

hot dogs from time to time, I am glad I'm able to offer him an organic option. I'm not fooling myself. He eats unhealthy food sometimes and hot dogs I would put in that category.

He also eats sweets and cookies sometimes. I'm sure he's at a Halloween thing right now getting a massive pile of probably conventional sweets, maybe hopefully a couple organic sweets in there as well. And I'm not fooling myself that there's other major health issues that organic is not the full solve for, diabetes, heart disease.

And I do think that, to be honest, the first solution to this if this came off would be highly salt-cured meats available in the marketplace that probably will fail. But you just end up pushing the problem from cancer over to heart disease.

Also, I know economics is a hard part for a lot of people to factor into things. But making use -- value-added uses of the whole parts of animals and selling that and having markets for

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

them that return help create viable markets. And while organic has grown quite a bit, it is still quite small.

Gelatin -- or not gelatin. Casings haven't -- the market for meat hasn't evolved to a point where we can reliably get organic casings.

Putting additional dents in the growth of organic meat which is one of the more expensive organic items to buy already just makes it -- it slows the growth in that trend. And I would much rather more animals under organic production than less.

And I agree with kind of what Lisa said and what we got from the commenter about the hot dogs is I go shopping with my son. Shopping at the grocery store and at the farmers' market, it's, like, one of my most favorite activities. And he's picking out whatever he wants. And he's, like, I want broccoli. I'm, like, great, we'll get the broccoli. And then, I want hot dogs. I'm, like, no, no hot dogs. And cut to home, he's eating broccoli and hot dogs.

So if there's an organic version, I'm

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

always grabbing that one. But that kid runs my life. So if there's not an organic version, there's oftentimes I will be forced into buying that one.

DR. BRADMAN: Sue, and then Emily. I'll start writing it down.

MS. BAIRD: I have to admit that I'm a little conflicted about this product because of the blue baby syndrome and things that do happen. But it is not our position to justify a lack of labeling perhaps by FSIS.

If this has got nitrates in it, if the celery powder contains enough nitrates that are causing health issues, that's bad. But we need to have that -- somehow that needs to be addressed by labeling. That's not our position. We're here to review the product.

I think I've got to support this. I've got to support this because exactly what Tom says.

I'm a grandmother, and I've got a kid who's going to have a hot dog. Hopefully not as a regular diet.

In fact, I know not as a regular diet. But they're

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

going to eat hot dogs, and I'm going to eat bacon because I love bacon. I don't think there's a life without bacon.

On top of that, I do market my farmers' products. And meats are one of the hardest things to market for a farmer. It's really easy to market the steaks or the belly which goes into the bacon and stuff. But it's really, really, really hard to market those off-products. And if they're not processed, if we don't have a market to process those products and retain those products, then there's almost no market.

Fresh is not the answer for most cuts of meats. And frozen unfortunately is not really the answer because people want fresh meat. And if they don't want to buy it fresh, I mean, I'm not going to buy anything but a fresh steak. But bacon is processed.

Man, I don't want to say that I'm supporting nitrates and nitrites. But there's no other alternative right now. So yeah, I'm going to have to support it.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

DR. BRADMAN: Can I just comment too? We're talking about alternatives in terms of organic celery powder versus nonorganic celery powder. And then alternatives, I think the way you framed it just now in terms of, is there an alternative to any nitrate enhancing treatment? So I think Emily, then myself, and then Scott.

MS. OAKLEY: I just wanted to say that I don't think choosing to abstain from a material vote is a bad choice. I think that sometimes we've gotten that feedback from people. But it is okay to be genuinely conflicted about a decision or to not fully determine that you know where you stand on something. Just putting that out there.

DR. BRADMAN: I'm just going to take the floor for a second to talk a little bit about kind of risk and risk assessment. Blue baby syndrome or methemoglobinemia I think would not likely be associated with use of this material. That's mainly associated in young kids with high contamination. So nitrite contamination of water in places like Central Valley in California. And

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

people may use it for formula, and then the kids are getting overexposed.

MS. BAIRD: I meant that with -- so are you saying this would not affect for the blue baby the nitrites in this?

DR. BRADMAN: No.

MS. BAIRD: Thank you. I appreciate that.

DR. BRADMAN: I mean, unless the agronomic practices have run off or something like that.

MS. BAIRD: Thank you. I appreciate that clarification.

DR. BRADMAN: In terms of cancer, you mentioned the potential more vulnerability of children. There are almost no guidelines on how to evaluate cancer risk in children. There's no formal guidelines. EPA doesn't have any. Usually it's kind of averaged as a lifetime risk.

Only in California, which we have California still, the Office of Environmental Health Hazard Assessment has come up with some

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

guidelines for adjusting potency factors for cancer for children zero to three and three to five. At the youngest age, they increased the potency by a factor of ten. And then the slightly older age, they increase it by a factor of three. But then that risk is averaged over a lifetime.

But those are not even formally adopted.

They've never been kind of formalized by the agency. They're just a guideline.

So it may be that exposure to a carcinogen when you're young is different than when you're a young adult. But no one really knows about whether there's a lifetime difference in cancer risk. So then I have Scott, then Dave.

MR. RICE: Just a quick comment. I mean, much of what I was going to say has been said.

So I don't want to pile on. But just putting a finer point on with the meat market looking at not just the impact of more meat equaling more organic product or more organic acres that those animals are on.

But more organic acres of the feed for

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

those animals and the impact of that and just our responsibility of looking at this off the criteria and the celery powder as celery powder. And given that, I'm definitely going to support continued listing of this.

DR. BRADMAN: Dave.

MR. MORTENSEN: Asa, your comments about the fact that we don't have data on children does not comfort me one single bit, right? Where we do have data, exposure of adults, adolescents, and children, almost always the children are significantly more sensitive just as you said.

DR. BRADMAN: Yeah.

MR. MORTENSEN: Yes, so --

DR. BRADMAN: Especially for noncancer.

MR. MORTENSEN: -- the fact that we don't have the data is unsettling to me, and I know that. But it certainly doesn't lead me to be confident that the lack of data should lead me to be more comfortable about making decisions about -- or even inferring, actually, the likelihood that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

there's going to be a greater effect on children than there would be on adults.

The other thing I would just say, like, none of this is personal, right? Like, this is how I see the world, and we all see it in our own ways.

When I was working on pesticide regulations and exposure with the EPA, they use a risk cup to assess risk which is to say, Dan, sorry to pick on you, if you have one bad habit, that's one part of your risk cup. You're going to choose to expose yourself to something. But we're all filling our cup in our own way. It's the cumulative effect of the exposures of things in life that come along.

And so that's just underpinning sort of the way my mind is working on this. I'm totally aware that animal agriculture is under great duress, including dairy. And so I'm not suggesting that we wouldn't use meat that is coming from organic sources. I wasn't compelled by the discussion that meat can't be frozen or meat can't

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

be constituted in other ways that wouldn't require this kind of preservation.

And as I said at the beginning, my view is that we don't have to have parallel products.

In fact, I think it's actually a bad way to go for the industry.

DR. BRADMAN: Just to clarify about children. It's true. I don't think there would be any way to have data about children. But what I was talking about is that right now there's no formal guidance on how to evaluate risk to children.

And along with that, I mean, it's almost impossible to do research on whether children are more or less vulnerable. But there is some informal guidance, but there's no formal guidance.

MR. MORTENSEN: Well, it's done by epidemiological work at least with some of the compounds which is where -- for example, the children's exposure to lead. That kind of insight comes from that.

DR. BRADMAN: Right. But that kind of data is actually for noncancer outcomes. I don't

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

think there's anything for cancer outcomes. And definitely in terms of noncancer outcomes like neurodevelopment, behavior, definitely exposures prenatally and early child have a bigger impact on children than adults. But that's a totally separate arena from cancer.

MR. CHAPMAN: I'm not getting the sense that this conversation is moving or changing people's opinions, and it's been pretty robust already. So I'm about to call the question to end discussion unless there's some brand-new point. But I don't want to go through three votes if we don't need to.

CHAIR BEHAR: Emily had a comment, and I just was going to say it's 6:13.

(Laughter.)

DR. BRADMAN: Okay. Emily and then maybe we should close --

MS. OAKLEY: Yeah. I just want to say, though, it's fine for us to differ in our opinions. And I feel like Dave is allowed to have a different opinion than everyone. And he represents a

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

stakeholder group, and he represents his own views.

And diversity amongst our opinions is important.

DR. BRADMAN: Absolutely. So at this point then, I think we're ready to close the discussion on celery powder. So let's proceed with our motion to remove celery powder from the National List at 205 -- excuse me -- 205.606(c) based on OFPA and 205.600(b). Harriet.

CHAIR BEHAR: We will start the voting with Ashley.

MS. SWAFFAR: No.

MR. CHAPMAN: No.

MS. de LIMA: No.

DR. SEITZ: No.

MR. MORTENSEN: Yes.

DR. BRADMAN: No.

VICE CHAIR ELA: No.

MR. RICE: No.

MS. OAKLEY: Abstain.

MR. BUIE: No.

MS. BAIRD: No.

MR. GREENWOOD: No.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

CHAIR BEHAR: Chair votes no.

MR. RICE: Excuse me, 11 no, 1 abstain, 1 absent, 1 yes. And the motion fails.

DR. BRADMAN: So Devon, if you could introduce fish oil, our next material.

MR. PATTILLO: Thanks, Asa. At Section 205.606(e), the listing is fish oil, parentheses, fatty acid, CAS Nos. 10417-94-4 and 25167-62-8. Stabilized with organic ingredients or only with ingredients on the National List, Sections 205.605 and 205.606.

DR. BRADMAN: Tom, you're on board.

MR. CHAPMAN: Fish oils used in organic processing and handling as an ingredient to increase the content of omega-3 fatty acids, primarily EPA and DHA to benefit human health by contributing to healthy brain development or other medical conditions -- addressing other medical conditions. It's used in -- it can be used in a variety of food products, but it's most often used in dairy products.

Public comment -- Public comment this

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

time has mirrored public comment received in the spring. And in the past, support came from dairy manufacturers, a manufacturer of fish oil, the trade association for fish oil. And then it was noted that it was used both by trade association and by a certifier.

Those opposed to it which came from interest groups, really the comments, I think, kind of roll up into human health impacts, environmental impacts, and necessity. And the one new piece that was here that wasn't in the previous reviews was a study that was conducted in or published in 2019 about efficacy of omega-3 supplements in relation to cardiovascular disease.

Other areas of human health impacts or at least the concerns of human health, so that's, like, on the efficacy of using fish oil supplements.

There's also concerns raised with exposure to heavy metals, although those concerns are the same concerns that have been raised in the past.

We had a substantial dialogue with manufacturers and the trade association, both in

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

this meeting and in the last meeting. And it appears that they do comply with Prop 65 safe harbor limits for heavy metals and where they exist, European or American standards or FDA standards on heavy metals and other toxins.

On the environmental side, that impact is generally around overfishing. And the overfishing piece, we as a Subcommittee requested a work agenda item to address the environmental impacts of harvesting fish directly for their oil. And the NOP has granted that work.

They have asked us in that and I'm quoting from their item that while our reviews about the environmental impacts of harvesting fish for fish oil, it's not to go down the route of -- I guess I'm not quoting right here, I'm summarizing -- go down the route of organic fish aquaculture standards which clearly the NOP -- or NOSB has worked on it in the past. And then they've also asked us in our review that we make sure it aligns with other federal regulations addressing fish harvesting.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Both the trade association and the manufacturer offered us some wording that they recommended to address our issues and were supportive of us addressing the environmental impact issue through an annotation. I can read those if people are interested. They were in the written public comment.

But they basically either offer a kind of avoidance of direct fishing for oil usage that can only come from byproduct or citing FAO guidelines for avoiding overexploited or depleted or recovering fish regions.

We also got a comment from an interest group that said if we're annotating it that we should look at the wild crop standard similar to what's being done with marine materials, although we're somewhat limited given that we can't look at organic certification of fish products as a solution to this.

So that's that. I do want to comment about the study. The study wasn't provided, so I did get my hands on it. But it wasn't, I think,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

available to everybody on this committee. It was focused on cardiovascular impacts and the connections there and the weak science for that.

But in its usage, at least in dairy products that I could find, the claims are not related to cardiovascular usage. It's related to brain development, eye cognitive development. So I don't know how relevant that is to the usage in the organic industry, perhaps as a direct supplement.

DR. BRADMAN: Thank you for that summary, Tom. So we're now opening this up for discussion to the full Board. Emily, Harriet. Harriet, Emily.

CHAIR BEHAR: I just want to say thank you to the NOP for giving us that work agenda item.

DR. BRADMAN: Emily.

MS. OAKLEY: Two comments or questions.

One, I know that there was some discussion within the Subcommittee about people's interest in supporting this based on the NOP's approval of the work agenda item. So I was wondering if anyone

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

would want to comment on that.

DR. BRADMAN: Lisa.

MS. de LIMA: I don't know if I was the only one, but I was one of those people. So I wasn't comfortable voting for it unless that work agenda item came through. And I knew that the environmental aspect was going to be dealt with through annotation at some point in the future.

DR. BRADMAN: Emily.

MS. OAKLEY: Yeah, so just to follow up on that, I'm also really happy to see that it's a work agenda item. But back to abstaining being a viable option. Because that is not the current annotation, I'm going to go ahead and abstain. But I am encouraged to see this Board move forward.

DR. BRADMAN: Dan.

DR. SEITZ: I just want to say that I share ambivalence on this item as well because of some of the environmental issues that have been stated.

DR. BRADMAN: Everyone tired? I was expecting more discussion on this item. No more?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Okay. Then I guess we can move to a vote on our motion to remove fish oil from 205.606 of the National List based on OFPA and 7 C.F.R. 205.600 (b) . Harriet.

CHAIR BEHAR: Voting begins with Tom.

MR. CHAPMAN: No.

MS. de LIMA: No.

DR. SEITZ: Abstain.

MR. MORTENSEN: No.

DR. BRADMAN: No.

VICE CHAIR ELA: No.

MR. RICE: No.

MS. OAKLEY: Abstain.

MR. BUIE: No.

MS. BAIRD: No.

MR. GREENWOOD: No.

MS. SWAFFAR: No.

CHAIR BEHAR: Chair votes no.

MR. RICE: The vote is 1 absent -- 2 abstentions, 11 nos, and the motion fails.

CHAIR BEHAR: I just want to ask the Board if they would like to quit and move the rest

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

of the agenda to tomorrow or if we should do one more. We do have a very long list, even if we don't talk a lot. I mean, we've had a long list this afternoon. And even just going through the motions of voting does take some time. So just asking. I don't want to make the decision for everyone's bodies and minds.

MS. OAKLEY: Well, we have people who have early flights tomorrow. So I think we should power through now because otherwise they might miss officer voting which seems really key that they're here for that.

MR. CHAPMAN: I think three of the four, maybe even all, they might be pretty quick.

DR. BRADMAN: Yes, I think we should power ahead.

CHAIR BEHAR: This is the power ahead kind of Board.

DR. BRADMAN: I'm not sure if I'm actually powering at this point.

(Laughter.)

(Simultaneous speaking.)

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

DR. BRADMAN: So Devon, if you could introduce gelatin.

MR. PATTILLO: Thanks, Asa. At Section 205.606(g), the listing is gelatin, CAS No. 90000-70-8.

DR. BRADMAN: Thank you. So I've taken over this item. Gelatin is used in a wide range of products as a clarification and fining agent in teas, juices, and wine, a stabilizer, texturizer, thickener in capsules and may either be an ingredient or a processing aid in candies, gummy bears which are, I think, particularly important to many, desserts, marshmallows, and jello, wow, dairy products, cosmetics.

Fish gelatin is often used in kosher foods and also -- learn a bit later, it's also used in the use of fish oil in dairy products. Gelatin can be made from a number of different sources, generally from cattle bones, hides, pig skins, probably mostly from hides and pig skins and also to some extent from fish.

It's prepared in a way that is more like

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

cooking and could be considered nonsynthetic. However, gelatin may also be processed in ways that render it synthetic. So that's where we're listing it right now, actually at 205.606(g).

Gelatin is used internationally in a number of different listings, EU and in the Codex Alimentarius. IFOAM -- there's a number of groups actually that permit it. Sorry. I'm taking over this sunset review from another member from A-dae who wasn't able to make it. There's no major issues with ancillary ingredients. So really we're dealing with a pure material here.

The public comments on gelatin are, in a way, kind of divided the way we've seen them previously with some concern about use of this material as a-- not sourced from organic material.

And the environmental and potential human health issues related to nonorganic production of gelatin, the argument that's been put forward on the trade side is that there's not a big enough meat market and industry to source material for organic production.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

There is, though, a fair bit of support for this in a number of processors and other organizations that are using this to make a variety of food products. I've mentioned some of them already.

So at this point, I think we can open it up for discussion by the full Board. Any questions or comments on gelatin? So I see Emily, then Tom.

MS. OAKLEY: Tom, you can go first.

MR. CHAPMAN: I actually was just moving my microphone getting ready to vote. So I don't have anything to say.

MS. OAKLEY: Well, I was just going to note that we had some robust discussion around this in the spring, right?

MR. CHAPMAN: Well, robust discussion around collagen. Collagen is a precursor to gelatin.

MS. OAKLEY: Right, as a connected issue.

DR. BRADMAN: Right. It's a similar

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

material to collagen.

MR. CHAPMAN: Virtually the same.

DR. BRADMAN: Yeah, in functional terms, it's actually the same material. Harriet.

CHAIR BEHAR: So if we're all eating more beef hot dogs, we'll get some organic gelatin.

Is that the deal?

DR. BRADMAN: Right.

MR. CHAPMAN: One of these days, or agricultural standards.

CHAIR BEHAR: Or more fish oil to get the gelatin.

DR. BRADMAN: So, any more discussion?

CHAIR BEHAR: Everything's interconnected.

DR. BRADMAN: Yes. Any more discussion on gelatin?

(No audible response.)

DR. BRADMAN: No, then I think we can take this to a vote with our motion to remove gelatin from 205.606(f) on the National List following OFPA criteria and 7 C.F.R. 205.600(b), so Harriet.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

CHAIR BEHAR: We start the voting with
Lisa.

MS. DE LIMA: No.

DR. SEITZ: No.

MR. MORTENSEN: No.

DR. BRADMAN: No.

VICE CHAIR ELA: No.

MR. RICE: No.

MS. OAKLEY: No.

MR. BUIE: No.

MS. BAIRD: No.

MR. GREENWOOD: No.

MS. SWAFFAR: No.

MR. CHAPMAN: No.

CHAIR BEHAR: Chair votes no.

MR. CHAPMAN: I said no, but yes.

MR. RICE: That's 13 -- 1 absent, 13
no. The motion fails.

DR. BRADMAN: Devon, if you could
introduce orange pulp?

MR. PATTILLO: Thanks. At Section
205.606, and the listing is orange pulp, dried.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

DR. BRADMAN: So, I've taken over the orange pulp sunset review from A-dae. And just to review some of the information here and then some of the comments we've heard earlier today.

So, dried orange pulp is a fiber. It's derived from orange pulp and other orange byproducts. We heard this morning about leftovers from juicing and processing that. The processing -- the process to create the product is patented.

I tried to actually look up the patent today. I'm not sure if I found it, but it's used in a number -- well, I shouldn't say actually it's used. The proposed uses that we've heard about are related to a number of food processing and food production purposes.

In the public comment and submissions to this board, we didn't really hear about any uses of this. And in the public comment, there really was no description of use of it. There were some comments, actually, were from OTA related to some groups that list -- or actually, production of organic pulp and selling of that for other purposes.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

It wasn't clear what that was for, but it doesn't seem related to this particular patented product.

In terms of new information, we got comments today from the representative of the manufacturer that we have not heard before, and I think that's really the only substantive comment related to supporting this material. There's been a number of comments from mainly consumer and other interest groups that this material is not appropriate as a non-organically sourced material and should not be used and allowed on the organic list.

I personally don't know the history of this material. I don't know if, Harriet, you can give us some institutional knowledge there. As a subcommittee, we voted -- I think in this -- hope this is our four-to-three day, but we voted -- four of us voted yes to take this off the list, one person voted no, and there were two absent.

I don't know if that should be actually yes four and absent three, because it seems like that was our low attendance day, so to open it up

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

for discussion, comments, concerns, questions.

(No audible response.)

DR. BRADMAN: Okay. Harriet, Steve.

CHAIR BEHAR: Okay. So, yes, I was in the room when this was first put on the National List. And there was discussion about why they couldn't -- it was a gentleman that had, you know, put it forward and spoke for it and said that there were customers who would be willing to use this. I guess, I'm kind of thick nerve, but there was discussion.

And it was actually not -- I don't remember what the vote was when it first got on, but there were people who felt that, "There is so many oranges out there, why can't we get this orange pulp?"

And the reason was the distance of the organic orchards to the juice factory to get the pulp or another juice factory to get that then wet waste pulp that was organic. However, since it is so difficult -- okay, that's the history, but we know that the organic citrus world is somewhat

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

suffering and having a hard time with disease and climate change, weather issues.

But I think -- I personally do not like the wide range of the listing, which then, I think, somewhat discourages manufacturers to go the extra mile to use the dried pulp to make dried organic pulp out there to then give those orange producers another stream of dollars coming into their operations.

I don't necessarily like also putting a patented product that the main reason we're putting it on there is because this one narrow use, which is patented. This is a generic list as we've spoken about before.

I know that 606 can be seen as a place for encouraging organic items to be manufactured, but -- I don't know. I think I'm not going to vote for this product to remain on the National List.

DR. BRADMAN: Tom. Anyone else? Tom, and then Steve.

MR. CHAPMAN: Yes. I mean, I thought I was going to vote this item off when we voted

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

on it in Vermont, and they came with a pretty compelling presentation on why they couldn't make it organic.

I think at the end of the day, this is not a widely used fiber period. It's pretty innovative, but I imagine this is, again, a little bit of me taking guessing, but they're a smaller company, smaller usage, and for whatever organic customers they have, it's probably a pretty small role usage of whatever this product is.

When there was no comments about the usage, I was on board with removing it. The public comment I heard today spoke about six products out there in the market, I think, or six companies out in the market that are using it.

There was also not really compelling evidence presented to me on why to remove it, other than people not using it, so the fact that we received some testimony about its usage, I'm going to vote keep it on the list.

DR. BRADMAN: Steve.

VICE CHAIR ELA: I'm conflicted. I

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

agree, Tom, and then I also heard the same person say, "Well, it was eight hours, nine hours, that maybe they could tweak it." And to me, you know, that left -- you know, if there was a compelling reason to push that envelope, it sounded like there might be a possibility and that -- I mean, if it was double the distance.

I mean, I think we need to encourage that use, and sometimes you have to kind of prod a little bit to say, "This -- you do have to go the extra mile." And I've heard that -- and I saw the comment from the orange processor saying, "We have this raw material available too," which, you know, they took the time to comment on that, which I also take a little bit seriously, so I'm leaning towards yes, but I'm listening.

DR. BRADMAN: Ashley.

MS. SWAFFAR: So, I kind of had to look back to our comments from fall '15 on this one, because there was so little on this period. And I did look at the manufacturer of this product's comment, and I noted they have a ton of options

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

that this product could be used in.

And as we heard today, six folks are using it and there is no alternative, but, Steve, one of the things that I wrote down from her comments from last time was there's not enough organic raw materials, fresh, wet, organic orange pulp on any given day within a proximity of the single Florida production facility to produce a minimum batch, so not even just run the plant all day, just one batch of it, so that kind of compels me -- the thing with 606, I'm going to say it again, if somebody comes up with an organic dried orange pulp, commercially available, then they have to use it, and they can't use this product. So, that's what 606 is designed for and there's no alternative right now for this product.

MR. CHAPMAN: Can I ask Steve a quick question? I missed my opportunity when he was yapping, but it was about --

DR. BRADMAN: Sure.

MR. CHAPMAN: I just have a really quick question.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

The comment, Steve, is that the OTA comment?

VICE CHAIR ELA: Say that again.

MR. CHAPMAN: The comment about orange processors using it, was it the OTA comment that you were referring to or is there another one that I missed?

DR. BRADMAN: Not that they were using it.

VICE CHAIR ELA: I thought it was from the manufacturers, but I'd have to look back. I'll look. I'm not -- I'd have to look.

MR. CHAPMAN: Okay. The only one I saw was OTA, and it looked like it was from orange producers, growers.

DR. BRADMAN: Yes, exactly.

MR. CHAPMAN: Not from a juice manufacturer saying, "I got this byproduct for you."

DR. BRADMAN: Yes.

MR. CHAPMAN: I think it's from like growers that are saying, "Clearly, this byproduct

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

is being made from the oranges I'm selling. Why can't you use it?"

DR. BRADMAN: Right, yes.

Rick.

MR. GREENWOOD: Yes. I think, obviously, they made a business decision, because if you go back to celery, there is no organic celery that we could make celery powder. In this sense, they could move their factory to a place where there are organic oranges and make the product, so they've made the decision not to use organic oranges, so I, you know, I can't support it.

DR. BRADMAN: Harriet, Steve, Emily.

CHAIR BEHAR: I don't know if it's still true, I didn't ask the question, but I remember from when it was first put on the list that they kind of either own or have long-term contracts with the orange groves around the plant. And, then, you know, it was just like too expensive to go organic.

Plus, I don't know exactly when this is a sunset -- sorry, end of the day -- 2022. That's

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

quite a while from now as far as, you know, encouraging them to figure out a way to get it worn out or closer.

And like I said, I know that the organic orange, fresh orange and juice oranges in Florida are struggling, and so I think giving them an opportunity to have another market for especially a secondary product, would be useful to them.

VICE CHAIR ELA: So, it was the FTA, but the three producers of organic oranges respond to the survey year-round. These producers generate organic wet orange pulp and peel as a byproduct, which is then sold to the food processing industry to re-dry it or otherwise used, so you can interpret that -- volume is hard to tell, but there is availability, and is obviously is dried if they say it, but that's the only --

DR. BRADMAN: Emily, and then Sue.

MS. OAKLEY: Yeah. I've said this before. I think, the litmus test for 606 has to be high especially when we have such a robust organic orange industry. And I echo Rick's

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

comments and Harriet's comments as well, and so I will be voting to remove it.

DR. BRADMAN: Sue, then Scott.

MS. BAIRD: Yes. I just was thinking though that she said it was a distance thing, so there may be all these orange people who say, "I have orange pulp," but maybe they're not close enough to her. To Rick's credit, he's saying, "Why isn't she close to them?" So, it's kind of a catch-22.

DR. BRADMAN: Scott.

MR. RICE: Yes. I think I was leaning towards voting to remove this as well, but given the comments this morning and just thinking about, you know, the organic sources are out there, and they are, been obliged to use those. Again, it's the purpose of 606 there.

And I think we can ask someone to be closer by an hour to an orange grove, but if there's -- to my mind, moving a manufacturing facility is no small thing and just giving that some thought.

DR. BRADMAN: Any other -- I'm sorry,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Harriet.

CHAIR BEHAR: One more quick comment.

We neglected actually to even ask her if she's reached out -- I mean, it could be that she -- I mean, I don't know if it's truly the closest organic grove --

MR. CHAPMAN: We asked her that. She said nine hours. And we asked her if she --

CHAIR BEHAR: Right, but we know that --

MR. CHAPMAN: -- contacted her processor who run organic. She said, yes, she had.

CHAIR BEHAR: But I don't know that she asked every organic grower in Florida. I mean, this is the one that she knew of a juice plant, one juice plant that she checked with.

MR. CHAPMAN: I mean, I guess, we didn't ask her if she went out and bought organic land and planted the oranges either. There's a limit to what we can ask people. I think she answered that question.

CHAIR BEHAR: Right. I mean, I don't

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

know how robust her review was for -- because there could be a closer grove and another juice plant closer in that's not doing anything right now that could happen.

DR. BRADMAN: Any other discussion, comments, concerns? Rick.

MR. GREENWOOD: Well, back to the celery, I mean, if there was an organic celery field somewhere, we'd tell them they have to use it or it wouldn't be on the list, so, you know, I don't think we can have it both ways.

DR. BRADMAN: Well, I think with the celery though that there was a \$2 million funding effort by the feds to move that in the direction we want it to go in is one difference.

So, I think, at this point, we should take this to a vote, so subcommittee brings this motion to the full board to remove orange pulp, dried from 205.606(n) of the National List based on OFPA criteria and 205.606(b).

Harriet.

CHAIR BEHAR: I think we start with Dan.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

DR. SEITZ: Yes.

MR. MORTENSEN: Yes.

DR. BRADMAN: Yes.

VICE CHAIR ELA: Abstain.

MR. RICE: No.

MS. OAKLEY: Yes.

MR. BUIE: Yes.

MS. BAIRD: No.

MR. GREENWOOD: Yes.

MS. SWAFFAR: No.

MR. CHAPMAN: No.

MS. DE LIMA: No.

CHAIR BEHAR: Chair votes yes.

MR. RICE: Thanks for your patience.

We had seven yes, five -- let me correct myself here. Seven yes, five no, one absent, one abstention, and the motion fails.

DR. BRADMAN: Okay. Devon, if you could introduce Seaweed, Pacific -- Pacific kombu seaweed?

MR. PATTILLO: Thanks, Asa. At Section 205.606(r), the listing is seaweed, Pacific

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

kombu.

DR. BRADMAN: Steve, I think we've -- put this in your lap. Sure.

MR. CHAPMAN: Just a quick -- I hear rumblings out in the audience, so like a point of clarification. There was 12 votes, seven yeses, so that comes out to 58 percent. Two-thirds is required to carry it, so that's why it failed.

CHAIR BEHAR: The decisive vote with the one abstention would have been eight yeses, and so we didn't make it. It was seven, so the motion failed.

MR. CHAPMAN: Indecisions. Okay. Seaweeds, this is one of A-dae's materials that I took over. This was another one kind of like in the orange pulp where we received very little public comment, and so -- and we didn't -- we received very little in the spring as well.

Basically, of the professional organization, CCOF, PCO, and OTA, none of them showed any members listing either of these two seaweeds. And I'll kind of talk about them both

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

simultaneously here even though they're listed separately.

There was a request that annotations requiring testing for heavy metals and radioactivity and prevention of over-harvesting were protecting organic consumers in the environment, and so there was the question of whether the allowance of the use of these are adequately protective.

There was also a request that the seaweed materials be reviewed within the broader context of the marine materials' document. Please consider that the addition of an annotation related to harvest restrictions and risk-based testing for toxic materials would need to be performed, so it's a pretty short discussion.

I was -- on kombu, I was the one that voted yes to remove it based on no one telling me that it was used and that bothers me. The rest of the committee voted no not to remove it, so I got lots of feedback from my committee members about all the seaweed products that I'm not familiar with,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

so it was educational. So, you know, I guess this, you know, it kind of comes down to a discussion among the board of whether you want to vote yes or no.

DR. BRADMAN: I'm sorry. Harriet, did you have your hand up?

(No audible response.)

DR. BRADMAN: Emily. Okay, sorry, I was reading the review.

MS. OAKLEY: What's preventing both of these seaweeds from being certified organic to the wild crop standard?

VICE CHAIR ELA: I don't have an answer for that.

MS. OAKLEY: All right. Well, then I'll just follow up by saying that with no one using this and with the wild crop standard applied to many other seaweeds, I don't really understand why this is still on the list.

DR. BRADMAN: Tom.

MR. CHAPMAN: I mean, I'm aware of Edwards & Sons' miso soup recipe that uses wakame

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

and kombu, so I know it's used in the marketplace.

DR. BRADMAN: Emily.

MS. OAKLEY: Well, I think, I mean, obviously, for consistency in my position, I think that this should be certified organic to the wild crop standard, so that's my take.

MR. MORTENSEN: I share that perspective. And, you know, with all the time we've spent on the marine materials' work, I was, you know, thinking that that's how this was, so I'll be voting the same way.

DR. BRADMAN: All right. I should say I've kind of been influenced by all the discussion today about marine materials, this meeting.

Harriet.

CHAIR BEHAR: All right. So, we didn't really have any commenters here or written, you know, to speak for it where we could ask, "Could this be certified or not?" That's a tough one.

You know, I mean, I personally would like to know that the wakame that I'm putting in my beans, you know, could, you know, was somewhat

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

overseen, because we know that our oceans have some areas that are cleaner than others, and also I would hate to contribute to the destruction when I think it could have been overseen to be more sustainable.

DR. BRADMAN: Steve.

VICE CHAIR ELA: All right. I guess, on the wakame, I voted to re-list it. I'm kind of tending towards delisting both, and we still have what I said earlier on the other one was, we still have a public comment through rulemaking if somebody really comes in and says, "This is going to be an economic hardship," but I just have a hard time with nobody telling me that this is necessary.

DR. BRADMAN: Ashley. Sorry.

MS. SWAFFAR: Yes. I just want to caution again about just because we don't hear from someone, doesn't mean that they don't use it. And to bring up again the brilliant part of 606 is if someone, some seaweed person or sea vegetable, whatever the correct terminology is, if they get these wakame and Pacific kombu certified organic through the wild crop standard, they have to use

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

them if they're commercially available, so that's the brilliant part of 606.

DR. BRADMAN: So, Lisa, then Scott.

MS. DE LIMA: So, I want to echo what Ashley said, because I'm looking at our next vote, and it's on kombu, and we didn't have anybody write in that they're using non-organic kombu in an organic product, but if you take -- Harriet just made me think of this -- if you look at Eden Beans, organic beans, and they have kombu in every single can of their beans, but they didn't write in saying, "Keep it on the list," so -- oh, sorry, we are voting kombu. It's seven o'clock. Are we voting on kombu? Oh, well, then, I'm definitely voting to keep it on the list, because it's in a ton of products.

DR. BRADMAN: Harriet.

CHAIR BEHAR: I'm just looking at the irony that livestock get organic kelp and humans don't get organic seaweeds.

DR. BRADMAN: Scott, and then Tom.

MR. RICE: I was not familiar that --

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

or Tom was a good reminder of the Edwards & Sons product. Even though we didn't hear from them, it's something that we have at our house, and we use. There's a bunch of it in our emergency kit, and we got it because it was organic, and so that's good to know.

MR. CHAPMAN: There's a lot of inconsistencies -- I assumed I was the next person. There's a lot of inconsistencies. On the food side, we have to use organic glycerin, but, you know, the livestock side, you can use conventional even from petrochemical sources, so --

DR. BRADMAN: Emily.

MS. OAKLEY: So, 2022 is a long time from now, and I think what we've heard is that many practices for the harvesting or even the farming of some seaweeds may be easily acquired with organic certification, so I still stick with my position and hope that it encourages the certification of these materials.

DR. BRADMAN: Dan, and then Tom.

DR. SEITZ: Lisa, if you don't mind,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

I just was wondering you say that it's in many products. What are some of the products that you mention?

MS. DE LIMA: Many of the Eden Bean products. It's in all of their beans.

DR. SEITZ: Oh, really? Okay, so all the different types of beans they sell, pinto, or whatever, okay.

MS. DE LIMA: Yes.

DR. BRADMAN: Tom.

MR. CHAPMAN: Yes. I mean, the successful model that we've seen with removal from 606 is when people come to us and say, "I have an organic product." It's not I assume there will be an organic product in the future. I am not an expert in every manufacturing methodology and there could be very good reasons why kombu and wakame may be more difficult to manufacture organically than other formats of seaweed.

I mean, nori is widely available out there. You see it in every supermarket, so there's clearly some that could be done, and, you know,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

the seaweed companies or most companies want to always increase their market share.

If it was easy, I imagine they'd be doing it because, like Ashley said, "If it's there, you got to use it." And frankly, the businesses we've mentioned generally are fairly strict on the organic side, so I imagine if they could source it, they would want to source it.

So, I really would prefer to see it available first and then remove it from the list, not the other way around. And that's the way it's been successful with hops, that's the way it was successful with yeast, so looking at, you know, making sure it's actually there.

DR. BRADMAN: Any more discussion?

(No audible response.)

DR. BRADMAN: I really don't know how I'm going to vote on this one, but let's bring a motion to the full board to remove seaweed, Pacific kombu from the National List based on OFPA and 205.600 (b).

Harriet.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

CHAIR BEHAR: I think we still have to start it with Dave. Is that correct? Does it seem right to you?

MR. MORTENSEN: That's right. I think so.

(Laughter.)

CHAIR BEHAR: I'm losing it a little here.

MR. MORTENSEN: Yes.

CHAIR BEHAR: Okay. So, Dave said yes. We're waiting on Asa.

MR. CHAPMAN: You're first with the next one too.

DR. BRADMAN: Yes.

VICE CHAIR ELA: That was a yes, Asa? No.

MR. RICE: No

MS. OAKLEY: Yes.

MR. BUIE: No.

MS. BAIRD: No.

MR. GREENWOOD: No.

MS. SWAFFAR: No.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. CHAPMAN: No.

MS. DE LIMA: No.

DR. SEITZ: No.

CHAIR BEHAR: Abstain.

MR. RICE: I've got one absent, three yes, nine no, one abstain. The motion fails. Yes, the motion fails.

DR. BRADMAN: Okay. Then, can -- Devon, can you introduce our last material seaweed, wakame.

MR. PATTILLO: Thanks, Asa. At Section 205.606(v), wakame, seaweed, Undaria pinnatifida.

DR. BRADMAN: So, Steve, I think you're on board for our last material today.

VICE CHAIR ELA: I would just say the same discussion as what we've already gone through.

I don't know that we need to repeat that, so if there's further discussion, that's fine.

(No audible response.)

DR. BRADMAN: No? No, okay. Then, let's bring this to a vote for a motion to remove

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

seaweed, wakame from the National List based on OFPA and 205.600 (b) .

CHAIR BEHAR: We will begin the voting with Asa.

DR. BRADMAN: Hold it. Dan, did you want to say --

DR. SEITZ: So, what products -- and I'm sorry, and maybe it's been raining somewhere, but what's the range of products that this particular substance is used in as distinct from the other seaweed that we just voted on?

MR. CHAPMAN: So, kombu was in the beans. Wakame is in miso, miso soup.

DR. SEITZ: In miso, okay.

MR. CHAPMAN: Yes. It's in Dashi.

DR. BRADMAN: Okay. Any other discussion?

(No audible response.)

DR. BRADMAN: No, okay. I'm going to repeat then that we want to bring this motion to the full board to remove wakame seaweed from the National List based on OFPA and 205.600 (b) .

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Harriet, I think I'm the first person.

CHAIR BEHAR: Yes. We begin the voting with Asa.

DR. BRADMAN: And I'm going to be consistent and say yes.

VICE CHAIR ELA: No.

MR. RICE: No.

MS. OAKLEY: Yes.

MR. BUIE: No.

MS. BAIRD: No.

MR. GREENWOOD: No.

MS. SWAFFAR: No.

MR. CHAPMAN: No.

MS. DE LIMA: No.

DR. SEITZ: No.

MR. MORTENSEN: Yes.

CHAIR BEHAR: Abstain.

MR. RICE: So, that was one absent, three yes, nine no, one abstain. The motion fails.

MR. CHAPMAN: Do you guys want to just keep pushing through and do fatty alcohols now?

(Laughter.)

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

CHAIR BEHAR: I think we should stick with the agenda and get some rest and come back with clear minds and --

PARTICIPANT: Oh, yes. That was intense.

CHAIR BEHAR: We can read more public comments. So, we are adjourned for today. We will start tomorrow morning at 8:30 a.m.

There is a reception. PCO is putting one on. I believe, there's still carts outside, 213 Smithfield Street, supposedly a quarter mile away.

(Whereupon, the above-entitled matter went off the record at 7:02 p.m.)

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

UNITED STATES DEPARTMENT OF AGRICULTURE

+ + + + +

NATIONAL ORGANIC STANDARDS BOARD

+ + + + +

FALL 2019 MEETING

+ + + + +

FRIDAY

OCTOBER 25, 2019

+ + + + +

The Board met in the Philadelphia Ballroom at the Doubletree Hotel & Suites Pittsburgh City Center, One Bigelow Square, Pittsburgh, Pennsylvania at 8:30 a.m., Harriet Behar, Chair, presiding.

PRESENT

- HARRIET BEHAR, Chair
- STEVE ELA, Vice Chair
- SCOTT RICE, Secretary
- SUE BAIRD
- ASA BRADMAN
- JESSE BUIE
- TOM CHAPMAN
- LISA de LIMA
- RICK GREENWOOD
- DAVE MORTENSEN
- EMILY OAKLEY
- DAN SEITZ
- ASHLEY SWAFFAR

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

STAFF PRESENT

MICHELLE ARSENAULT, NOSB Advisory Board
Specialist, National Organic Program
PAUL LEWIS, Ph.D., Director, Standards Division,
National Organic Program
DEVON PATTILLO, Materials Specialist,
National Organic Program
JENNIFER TUCKER, Ph.D., Deputy Administrator,
National Organic Program

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

CONTENTS

Crops Subcommittee

Topics:

Proposal: Fatty Alcohol	5
Proposal: Potassium hypochlorite	50

2021 sunset substances review:

Hydrogen peroxide	67
Soaps, ammonium	70
Oils, horticultural	76
Pheromones	83
Ferric phosphate	85
Potassium bicarbonate	95
Magnesium sulfate	98
Hydrogen chloride	102
Ash from manure burning	103
Sodium fluoaluminate Discussion	113
Document: Paper	115

Materials Subcommittee

Topics:

Proposal: Excluded methods - Induced mutagenesis and embryo transfer in Livestock.....	129
Proposal: Genetic Integrity Transparency of Seed Grown on Organic Land.....	132
Proposal: NOSB Research Priorities 2019	169
Discussion document: Marine materials in organic crop production.....	177
Verbal update: Assessing cleaning and sanitation materials used in organic crop, livestock and handling.....	200

Policy Development Subcommittee

Topics: Proposal: Updates to the policy & procedure manual (PPM)	211
---	-----

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Livestock Subcommittee

Topics: Proposal: Use of excluded method
vaccines in organic livestock production 216

2021 sunset substances review:

Atropine 241
Hydrogen peroxide Iodine 246
Magnesium sulfate 254
(Parasiticide) Fenbendazole 257
(Parasiticide) Moxidectin 269
Peroxyacetic/Peracetic acid 272
Xylazine DL - Methionine 275
Trace minerals 303
Vitamins 306
Discussion document: Fenbendazole 314

Compliance, Accreditation, and Certification
Subcommittee

Topics:

Verbal update: Integrity of the supply
chain/Oversight improvements to
deter fraud..... 220

NOSB Officer Elections 334

NOSB work agendas/Materials update 337

Recognition of outgoing members and
closing remarks 341

Adjourn 350

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

(8:30 a.m.)

CHAIR BEHAR: Welcome to day three of the 56th Public Meeting of the National Organic Standards Board.

Today we're going to go through the materials and proposals from the Crops Subcommittee, the Materials Subcommittee, the Policy Subcommittee, and the Livestock Subcommittee, and the Compliance, Accreditation, and Certification Subcommittee, so I don't think there's too much on the agenda. I'm being sarcastic if you don't -- can't tell.

So we will start first with Steve Ela, the subcommittee chair of the Crops Subcommittee.

VICE CHAIR ELA: All right. Good morning, everybody.

We're going to start with two proposals that we have on the docket and then move into our sunsets and finish with a discussion document. So we will start with the proposal on fatty alcohols. Devon, do you want to read 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

introduce it?

MR. PATTILLO: Sure. Thanks, Steve.

Before the Board is a petition to add fatty alcohols to the national list for organic crop production at 205.601 paragraph (k), specifically the petition request allowance of synthetic fatty alcohols C6, C8, C10, and C12 for tobacco sucker control.

The petition was submitted by Green Ag Supply LLC on December 10th, 2018 and was transmitted to the NOSB on February 11th, 2019.

A technical report on fatty alcohols was prepared in 2016 and is available on the NOP website.

VICE CHAIR ELA: Jesse is the lead on this. Jesse, do you want to --

MR. BUIE: Okay. Good morning.

A petition requesting the addition of revised active ingredients C6, 8, 10, 12 naturally derived fatty alcohols was received by the NOSB December 2018 to be added to Section 205.601(k) of the National List.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

The petition asks for the substance to be annotated for sucker control of organic tobacco crops. The petitioner has made numerous revisions to their original petition which was submitted in 2015.

According to Dr. Matthews, the original petition was for the use in tobacco and other crops, contained reference to multiple materials including inerts and did not specify the range of fatty alcohols in the material MASCOL80.

The repetition as revised specifies the use on tobacco only, clarifies material being petitioned, and includes the full range of the alcohol C8 through C12.

The NOSB's formal recommendation on December the 2nd, 2017 to the NOP stated, among other issues, the use of synthetic growth regulator is not compatible with the system of sustainable and organic agriculture.

The repetition specifies the need for the synthetic growth regulator on organic tobacco for sucker control.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

There could be human health concerns caused by the exposure to nicotine when hand suckering. The NOSB has received a petition signed by many tobacco farmers stating that they need this material which had been allowed by a few certifiers in the past.

Growing organic tobacco can be one organic crop in a longer crop rotation. Some producers have stated that if the material is not approved, there may -- they may choose to no longer grow other crops organically on their farms.

On the adverse impacts, the fatty alcohols from both natural and manufactured sources represent a low risk for environmental contamination.

There is no evidence to suggest that the aliphatic alcohols cause increased susceptibility to health problems in infants and children.

Based on the results of the available studies, no end points of toxological concerns have been identified for human health risk assessment.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

The EPA concluded that there are no human risks of concerns for aliphatic alcohol, and that was TR lines 396 to 399.

Fatty alcohols are chemicals that naturally occur in all plants and animals and are known for their high level of biodegradability in the environment.

Their derivative products are additionally designed to rapidly degrade after use and are not considered endocrine disruptors.

The review of subsequent -- Okay. The review and subsequent denial of fatty alcohol petition at the fall 2017 NOSB revolved around several issues.

The first issue, the uses requested by the petition material were broad and extended beyond the limited use of tobacco desuckering.

Since other uses of the petition material were not allowed by the EPA, the Board was forced to either -- was forced with either adding an annotation to the listing or denying the petition.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Secondly, the petition was not clear as to which fatty alcohols were being requested.

The petition contained references to multiple materials include inerts and did not specify the range of fatty alcohols requested.

Thirdly, there was little evidence provided for essentiality to organic production in the original petition.

The Board reviewed few comments noting that this material was essential for organic tobacco production. The Board was also not aware that fatty alcohols had been approved for some certifiers and not by others and that some growers were already using the material.

During the review of the current petition, several of these issues have been addressed.

First, the current petition is limited to the use of fatty alcohols on organic crop production.

Secondly, the fatty alcohols being requested are clearly spelled out and match those

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

available in the products previously allowed by some certifiers.

Thirdly, the Board received numerous comments during the spring 2019 Board meeting, noting the essentiality of the material to organic growers.

These comments were received even though the material was not on the meeting agenda.

Numerous tobacco growers noted that without this material, they would be unable to produce organic tobacco and would most likely drop their organic certification, including the certification for crops that they use in rotation with tobacco.

The reason for essentiality include other currently available materials are ineffective and sporadically effective whereas fatty alcohols are effective and reliable.

Manual desuckering involves numerous passes through the fields and exposes workers to the potential for tobacco poisoning and numerous health issues.

The use of fatty alcohols prevents this

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

exposure and is necessary to prevent -- to protect human health.

The suckers of tobacco plants provide habitat for aphids and increase the susceptibility of the plant to other pests.

Desuckering the plants reduces pest pressure. The Crops Subcommittee is aware of the negative impact on human health of tobacco use. However, tobacco is a legal crop and a crop eligible for organic certification.

Like any other material for use in organic crops, the Committee is limiting our review to whether the material meets the criteria necessary for adding to the National List as a crop production aid.

Since fatty alcohols occur naturally without the -- throughout the plant world, breakdown are readily -- it break down readily after use, help prevent worker exposure to tobacco poisoning, and reduce insect problems, they are compatible with a system of sustainable agriculture.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Public comments were overwhelming in support of fatty alcohols. Comments against listing fatty alcohol include, number one, they pose a health and environmental hazard; number two, these comments said that they were -- it was not essential and was inconsistent with organic crop production.

That ends my presentation, but at this time, Emily will present the minority opinion.

MS. OAKLEY: Thank you, Jesse.

So yes, I wrote the minority opinion, and we discussed this pretty robustly as a subcommittee. I won't read you the whole minority opinion, but I'll just summarize that the TR for this material notes that fatty alcohols do not fall into any OFPA categories and although manual control is clearly more expensive, the same can be said for manual pruning and removal of suckers on many other crops.

But for me, the key issue is that the foundation of organic agriculture is predicated on using natural, manual, mechanical and cultural

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

controls over synthetic materials.

In many cases, this means utilizing hand labor in is part of why organic receives a priced premium.

Labor saving and greater economic returns are insufficient criteria for adding a synthetic material to the National List.

So organic tobacco growers have been growing organic tobacco without fatty alcohol for a long time before they started using it in about 2007.

And although I do empathize greatly with the growers particularly in that they were allowed to use material by their certifiers that hadn't gone through the adequate review process, the empathy that I have for them doesn't mean that I feel that that makes this material compatible with organic agriculture.

I feel that organic agriculture is distinguished by the fact that we don't spray chemicals in place of labor. For example, we don't use herbicides in organic crop production and we

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

do have a plant growth regulator on the National List, but I think we know from previous Sunset review the slippery slope that some have claimed this causes us.

We did hear from Dr. Bill Collins here during the public testimony that nicotine poisoning happens at harvest not at sucker removal, so the claim that we would add this to help protect workers I think is somewhat called into question.

I would say that the way to make organic tobacco profitable is for the Santa Fe Company and others to pay growers more and for consumers to pay more for the product, not to allow a chemical to avoid labor costs.

And our previous vote on this was unanimous. I will say that when this came up in the summer and we voted on this again, I had some personal challenges on my farm that prevented me from delving more deeply into an issue that I think we should be discussing here today which is that this petition is for naturally derived fatty alcohols made from Sumatran palm kernel oil.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

And the petition does provide a certificate for roundtable on sustainable palm oil, but there is controversy within the community as to whether or not that certificate is adequate.

There have been various studies on that certificate, but one that was published in 2018 found that there was no difference in environmental sustainability from certified versus non-certified palm oil plantations.

And I know that this is a new subject to be introducing right now, but I think it's something that's really important for us to discuss because farmers are applying 6 to 10 weeks of fatty alcohol, which is a lot of palm kernel oil, and I think it is something that we need to do our due diligence on because it's part of the manufacturer of the product.

But I am curious to hear from my fellow Board members for those who supported this unanimously in the past what has changed in their support. And I think a lot of people would say that it is hearing from the growers, which I agree

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

is extremely compelling.

But I also wonder to what extent we hear that and make changes based on previous determinations. If growers came to us and told us that they needed herbicides, I don't think that that would change our position on herbicides.

And although this is not an herbicide, it does play a somewhat unique role in organic agriculture as a sucker removal.

And that's all I have to say, and I guess I'll turn it back to Jesse. Thank you.

VICE CHAIR ELA: Okay.

I will open it up for Board discussion.

Tom?

MR. CHAPMAN: I can speak to my vote previously. I had made the motion and attempted to send it back to Subcommittee in Florida, and the Board did not agree to do that.

At that time, the petition was not in a state that I felt fit to vote on, so it was because of that why I voted it down. But I preferred greater discussion at that time, which other folks

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

on the Board disagreed with.

I did have a question back to you, Emily, and I imagine you're expecting this one. But you put a lot of your position related to the economic impact and labor costs, and I can't help but contrast this with similar comments you've made in the past with paper pots and the impact that that has economically on small operations.

And given that that's -- also seems to be full of synthetic materials, how do you -- can you help me understand the why one would be acceptable and the other one would not?

MS. OAKLEY: Sure. I'm not sure that I have actually ever used the comment that it is a -- that it's for labor saving or for economic reasons.

I don't -- that is actually not for me, why I would support paper pots. And I am not surprised that question came up because we discussed that also as a subcommittee.

For me, the difference -- although there are definitely lots of similarities between

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

those two materials, particularly in terms of growers being allowed to use a material -- is that paper is already on the National List and fatty alcohols are not.

So this was a different determination I think by certifiers in that they assumed that that use was already permitted.

For me, the reason to allow paper pots is to be consistent with our existing paper listing.

I think it can be clearly argued in my view, although I know not everyone would agree with this, that when the paper pots are used, their initial use is as a transplanting plug cell, so as this, you know, the container in which the seedlings are grown.

So that's their first use. Then they become recycled because then they're recycled when they're put into the field.

So I think that it's a quite different distinction, but I don't use paper chain pots, and I use a mechanical transplanter. And I think that they're both equally viable.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

I don't have experience with paper chain pots, but for me, that was -- has not been an argument that I think I have personally made.

VICE CHAIR ELA: Other Board members?

I will recognize this myself. I changed my vote as well on this. I think it really comes down to worker protection for me. We use a lot of hand labor on our farm to thin peaches that far exceeds the amount of suckers.

You know, we figure we remove somewhere between 0.75 to 1 million peaches an acre by hand.

So we do it, but we also have a much higher price premium for our crop.

But I heard from a number of growers how their workers, this is their most hated job, to go out and do this, and I -- you know, I recognize that. And so from a worker protection standpoint, I think that's probably where I switch my vote because I -- farm workers are -- they do a crazy amount of work, and I don't want to make their lives more difficult.

The economic argument is difficult

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

because that's not really what we can decide on.

But I also recognize on the bigger picture that tobacco is part of a system just like strawberries are in California and that I think as that rotational crop, we are able to expand our organic footprint in a very positive way.

I can make the decision on worker protection and human health in terms of farm workers, but I think the -- you know, hearing from Carolina stewardship program about how this has changed -- has been a game changer for those farmers and that they're now a high percentage in the national map, you know, that perks up my ears. So that is where I've come down on the fence.

So Emily.

MS. OAKLEY: So could I ask you a question about Dr. Collins's testimony saying that tobacco greening -- poisoning doesn't happen at sucker removal, that happens at harvest?

VICE CHAIR ELA: Agreed. But I also heard from other people that it does happen and, you know, it still comes back. I can't remember

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

who it was, but you know, it's so compelling when somebody says my workers are so happy they don't have to do this anymore.

I mean, these -- my experience, these are workers that will do almost anything to make money, and when they come back and say this is terrible, I -- just from a human -- a humanity standpoint, I -- that has meaning to me as somebody that does employ a number of workers.

Other Board members?

CHAIR BEHAR: Okay. Nobody is going to be able to figure out how I'm going to vote or what I'm going to say.

So I live in Southwest Wisconsin and Southwest Wisconsin and South-Central Wisconsin used to grow a lot of tobacco.

And it was really kind of the pay the mortgage crop for many small farms and midsized farms. I actually have a tractor that I use for cultivating vegetables that I got from a tobacco farmer.

Between the mid-80s and mid-1990s,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

those tobacco allotments have gone away, and I think there's only maybe 40 acres left in my county, although it might be gone. I can't remember. And it used to be in the thousands.

I have actually cut tobacco myself and helped out the neighbors. I understand the social and economic impact. This was a place where people would get together and they'd go from farm to farm and help people cut and help people hang and then even during when the dried tobacco is taken down from the drying barns and then stripped and what's called case -- case it up and get it ready for bundling it up, basically, for sale, that was another time when people -- I mean, I went and helped case for my friends, and it was like we still call it casing weather when we get a foggy time in December because -- excuse me -- if it's somewhat foggy and humid in the air, then when you're handling the tobacco leaves they won't shatter so much and you can bundle them better.

And so I -- you know, I kind of have fond memories of doing that with my friends and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

seeing all my neighbors all getting together and working together and then there would be big potlucks. And that was, you know, important.

And I have seen that benefit to having that. And that's what all those farmers have -- you know, when they were speaking about how they needed it and how it's important crop in the rotation, that brought me back to that memory.

On the other hand, a good friend of mine, the person who I used to help case tobacco, contracted throat cancer, suffered for years, and succumbed to that disease. I'm still very good friends with his family and we miss him all the time.

And this was a farmer. He did not smoke tobacco. He raised tobacco because it was an economic beneficial crop for his farm.

I've seen the tobacco go away in my county, but I haven't seen the farmers go away. They've managed to find other crops to fill in on the tobacco and they would killed -- still be growing tobacco if the Government hadn't taken away

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

the tobacco allotments.

They're growing organic. Many of you know, maybe you've heard of Vernon County, Wisconsin which has the highest concentration of organic farmers in the country.

That was also a big tobacco growing county. They're growing organic vegetables, fruits. They're getting into hemp now. There's a lot of growing grains for distilleries and hops for breweries and the farmers have been resilient in finding substitutes for the tobacco.

And we don't see the same numbers of farmers contracting cancer, which relates a lot.

I think actually most of it comes when you're casing because it's very, very dusty work when you're taking down the dry tobacco, stripping the leaves, and bundling it.

And then on the other hand, it is a legal crop. And so my personal emotional issues with this I'm not sure if I should let that come into play or not. I mean, I am a human, and I think that that is an important part to decision making.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

I also think what Emily has said is compelling and that, you know, there is somewhat of a slippery slope of, you know -- I remember -- again, let's go down memory lane -- when tree fruit growers petitioned -- this is a way long ago -- for a synthetic to do some thinning of flowers on their fruit trees.

And since there was a mechanical way to do it, which was hand thinning, and then there's other ways to do it too with approved materials. That was denied.

And so I'm just thinking about that, thinking of the NOP. So it's kind of one way or the other, and I am very much struggling with this vote, and I guess I'm just going to wait to hear from the rest of the Board members to help me see which way I should go.

VICE CHAIR ELA: Emily.

MS. OAKLEY: If others want to say something, I don't want to hog the time. But if there's a break, then I would say something, so.

VICE CHAIR ELA: Other comments?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Lisa?

MS. de LIMA: So for me, a bunch of what Steve said resonates with me as far as it being -- hearing from all the farmers definitely had an impact on me, especially hearing that it's a rotational crop and part of the larger system on their farms.

And so at the end of the day, I think that sways me to voting to list it.

VICE CHAIR ELA: Dave.

MR. MORTENSEN: Like Harriet, I am conflicted on this vote. My -- I was pretty certain I was one of the ones to say no to having it added.

Either I'm sure that I was, actually the last time we voted.

And since that time, we've heard on the public comment webinars, the growers here, we've done more reading.

I've been struck by the argument just, as Lisa articulated, of the -- what I think of as the keystone crop. You take it away and it undoes the economic viability of the farm.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

I am almost certain that Dr. Collins was wrong, although I have not done a deep study on this.

When I was living in North Carolina for nine years, I did have the opportunity to work in flute cured tobacco fields for two years, two field seasons doing research.

And the exudates that you come out of the field covered in, once the tobacco's waist high or higher and that's when they're spraying the suckering material is loaded with all sorts of secondary compounds that I'm sure includes nicotine and other things. So I can't believe that you're only exposed to that stuff at the end of the season.

We all know that most of that labor is done by, you know, hired hands and folks that are out hoeing and doing that kind of work, as Steve has articulated, day in and day out through a very long and hot summer.

So my views have shifted some, but I continue to be conflicted. So that's where I am.

VICE CHAIR ELA: Scott.

MR. RICE: Yeah. I think it's hard not to be conflicted on this in terms of how we view tobacco these days and the health impacts that that has.

But I think, you know, that's similar to other conversations we've had at this meeting.

That's not really our task here. And for me, I think with it, again, being that part of a crop rotation that keeps these folks in business, and Harriet, I know you shared some of your experience where you are, but I think there may be regional, local differences between how a farming system is established and how those businesses continue.

And I think we've heard from many people that without this as part of their rotation they would not be farming and perhaps not be farming -- or certainly wouldn't be farming organically.

And so when we can have more organic acres, would the use of what is a fairly light footprint in terms of a material, it's hard for me not to support that when hearing all those combined.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

VICE CHAIR ELA: Emily, and then Sue.

MS. OAKLEY: So a couple of things. Yes, I definitely hear that this is a keystone crop. And even for diverse growers like myself, we tend to have one crop that rises above the rest as highly profitable.

And for me, that is tomatoes. And I've experienced years that have been very bad tomato years, and I've experienced years that have been very good tomato years.

And ironically, it's the diversity that helps make up for the years that are very bad tomato years.

And what affects that crop negatively will help another crop that I grow successfully.

And I think it actually encourages diversity to have that mixture. You're hedging your bets.

I also just want to say that I looked on the organic integrity database, and there are over 300 growers of tobacco listed, over a dozen crops, and over multiple countries.

But we heard from a relatively small

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

subset of tobacco growers, and I know that they're an important part of that community. But we also did hear from a certifier who certifies tobacco saying that their growers don't need and that they were opposed to the material.

I also think that we really did not do our due diligence on the manufacturer of this material, especially with relation to palm kernel oil, and I think that that is something that should definitely give us pause and was not adequately addressed in the TR because this material is for naturally derived fatty alcohols from palm kernel oil.

But the TR gave quite an extensive description of all different types but really did not go into this aspect of it. And I think -- I at least urge everyone to consider that significantly.

VICE CHAIR ELA: Sue.

MS. BAIRD: Thank you. I appreciate hearing the different conflicts we all have.

I hate smoking. I hate tobacco

smoking. My children decided they have to do that, and I don't know why they decided that. Neither my husband nor I did.

But if they're going to smoke, I would rather they smoke organic tobacco than non-organic.

I've got one son who smokes Spirits, which is an organic cigarette. The advantage to that is there is no all the added tars and all the added synthetics because it's an organic tobacco.

I lived through the time of -- Missouri used to have a lot of small organic -- or not just -- not organic, but they had small tobacco farms.

And during the time the Government took the allocations away, we lost all of that.

I've always been an advocate for the small family farm. Those of you that's known me for all these years know that small family farms are my heart and my passion.

This -- from everything that's been presented appears to be a really, really, really benign substance. And I don't want to see tools kept from small family farms that help them to stay

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

viable.

I do want to see tools added that protect the worker health and wellbeing and quality of life.

So yeah, I change -- I'm going to change my vote. I appreciate the palm oil issue. I think that's something we've got to address perhaps as a separate issue. So just my say.

VICE CHAIR ELA: I didn't see which one, Tom or Ashley, which one was first. Ashley, go ahead. I'll make the decision.

MS. SWAFFAR: Okay.

So I do support listing this material. You know, there's no alternative that we heard besides the hand suckering. I think there might be something in the future but you know, nothing right now.

And the one thing I know that several folks on the Board are conflicted because this is a crop that they probably don't agree with, and I feel like that's not our place to judge an item for a crop that we don't agree with.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

And I would encourage those of you who are feeling that way to abstain from this vote. If you don't agree with a crop, you know, that's not fair that you would give it a no vote just because it's tobacco.

And the other part, Emily, you had said that we heard from a relatively small subset of tobacco growers. I actually felt like we heard from an amazing amount of tobacco growers.

And I actually thank them for their time on the webinars and in person and in public comment.

That's actually -- I thought we heard from a very significant amount of tobacco growers, and I appreciate them taking the time to tell us how important that this is to their production system.

So I wanted to recognize that. I appreciate their time and effort.

VICE CHAIR ELA: Can we let Tom go first?

Tom.

MR. CHAPMAN: Yeah. I echo what Ashley says, and if we've got 30 or so farmers of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

300, it's 10 percent. That -- I don't think we've gotten that response rate from any subset of grower since I've been here. So I'm actually impressed by the numbers that we've seen in that regard.

I want to speak to the keystone crop piece. I mean, we talked, you know, tomatoes have been brought up as a counterpoint to that.

But granted, data out there is not very good. I pulled data for acre values, trying to use USDA data and don't fully check me on this because, you know, it was multiple years, but it was the best I could pull off the internet yesterday.

But the return per acre on a tobacco crop is somewhere -- on a conventional tobacco crop, is somewhere between \$4- and \$5000 and it looks like the return on it a tomato field crop is, you know, \$12-, \$13,000. So we're talking about a significant difference when the \$5000 crop is your keystone crop that's keeping your farm going.

And if you, you know, significantly increase the costs to produce that, that's not

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

longer probably that keystone crop even with other rotations.

At the end of the day, even if people don't want to talk about it, organic competes with conventional substitutes. And I know my business is out there every day competing against other bar manufacturers who people assume are organic aren't organic.

And you know, the amount that we can differentiate ourselves and sell it in equals more acreage under organic management, but you know, it's simple supply and demand that as I increase my costs, I lose the people, the number of people that will buy my product.

So while I might be able to still be a profitable company, I will sell less. And if I sell less, that means there will be less acreage under organic production.

And that's true of this crop as well.

So I don't know how realistic, you know, looking at American Spirit and seeing if they can raise their pricing to solve this issue alone.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

The last two pieces I wanted to really briefly talk -- touch on is I guess oil chemicals because that's coming up at the last minute on this item.

But yeah, there's issues with palm oil.

RSPO is actually the widest acceptable -- and I don't want to put Lisa on the post, but you know, when we're out there, palm oil is actually one of the number one questions we get as a brand is what palm oil we're using and who are we working with.

And generally for the palm oil our company I'm blessed to say is using organic and Rainforest Alliance-certified. But that's few and far between.

And to be frank, in the derivatives, which this is so fractionated palm products. There is no organic and RA out there.

So those options aren't available. RSPO is the certification accepted by retailers across the board to meet the standard domestically and in Europe. And Europe is much further along in the palm oil discussion than we are here

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

domestically.

But palm oil is not the only product that oil chemicals come from. Palm oil is one of the largest fat sources out there in the world, so that's why that one gets focused on.

But it's not -- you know, once you fractionate that fat, there is really not much of a chemical difference between it or one derived from tallow, which is another major source.

The other major sources domestically are soy and canola, but those probably are not used in this manufacturing because of the GMO contamination problems.

So I don't know if this is tied exclusively to palm and it's last minute, but also that criteria would need to be applied across the board. I like picking on the glycerin, the livestock listing.

But glycerin is a product of the oil chemical industry. And without any greater annotations on that, it could be from petrochemical or it could also be likely from palm.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

So there is a lot of other listings out there that could potentially share that same issue.

But it could also be from tallow or rapeseed and not be palm or GMO. So it's a bit more complex than just that one piece.

The last one I want to touch on is the labor piece. That's the highly compelling piece of this argument for me is worker safety and just putting -- I don't want to be in an industry that puts the burden of going organic on the backs of laborers.

And you know, when I was -- I was blessed to go down to Paraguay to visit a bunch of fair trade and organic sugar cane operations that are generally manually harvested by chopping cane.

And with the fair trade premiums, the first thing those coops did was buy a mechanical harvester because that work was the worst work. And -- but that's -- that's what for the longest time is what organic sugar cane was built upon.

And if there was a fairly benign alternative that allowed for those workers to not

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

have to go through that strenuous labor, you know, the human health impacts of harvesting sugar cane, there's studies out there about the shorter life span of those workers.

So you know, again, it's oftentimes these tradeoff decisions we're making is not a -- it's a good versus the bad, it's about where the bad is being placed. And for me, this material has more good than bad.

VICE CHAIR ELA: Emily, quickly. And then we can go to Rick and Dan and then we need to -- unless there's more substantiative things that are going to change people's votes, we're -- we need to move on because we're going to be short on time for some of the other discussions.

So Emily?

MS. OAKLEY: Yeah, I just wanted to quickly clarify that I didn't mean it was a small subset of growers. I should have said a geographical region, that it's from one area, one state, whereas we have, you know, 15 states growing this crop.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

And then we did hear from some growers in written testimony from other states, but they were a small -- like you know, West Virginia, Virginia. That's -- but I just want to clarify.

I do agree we heard from a lot of growers, and I greatly appreciate that, and it is a unique thing.

VICE CHAIR ELA: Rick.

MR. GREENWOOD: Yeah. My background's public health, and when I first saw the proposal, I was immediately against it because of tobacco. And I actually was responsible for passing a very strong anti-smoking ordinance in Orange County, California.

So I was completely against it. Over time, I realized, again, it's a legal crop, and so it's not for me to take my thoughts about smoking in terms of our decision making process.

And I've been very impressed by the people that spoke. I think reminded me of the ethylene folks that came up to talk about that. I mean, it's -- for them, it's a key component of their entire system.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

And the idea that more organic fields are being put into production, I think is a key issue for me. I mean, that's what we're all about is encouraging organic agriculture.

And I'd hate to see that get derailed, so I'm for it with a little bit of heartburn.

VICE CHAIR ELA: Dan.

DR. SEITZ: Just to say I am conflicted for all of the reasons that we've heard today. And one of the things that also makes a decision like this difficult is that we see that it's very hard to take substances off the National List because of the two-thirds requirement to -- during sunset.

So there may be circumstances that change that would bring another substance that's more benign, more in line with the criteria, might make that practical.

But we see oftentimes that because something becomes a regular practice, it's hard to remove from the National List. So that I feel is a little bit of a challenging aspect of this

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

as well.

But I'm still trying to make up my mind on this substance.

VICE CHAIR ELA: Harriet. Short, please.

CHAIR BEHAR: Just two things, that worker exposure is not only at suckering to the tobacco. It's the everything from planting through.

And -- I mean, I agree with Dan, too, with the taking off of the material is somewhat difficult.

But I -- we haven't heard from Asa, and I would like to hear from him.

VICE CHAIR ELA: He's actually -- well, it's his choice. You don't have to speak, Asa, but you --

DR. BRADMAN: I actually wasn't planning to discuss it today. I just wanted to take in the comments. Thanks.

VICE CHAIR ELA: Okay.

Unless I see anybody else --

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. BUIE: There's one more.

VICE CHAIR ELA: Jesse?

MR. BUIE: Yeah, I just want to remind the Board that this substance fully meets our criteria for listing. So we -- out of all this discussion, I don't think we brought that back up, but it fully meets all our requirements for listing.

CHAIR BEHAR: One other thing. As I think part of why we were -- we're in this position is that the farmers have been able to use it in the past. The certifier declared it as non-synthetic. And so there was somewhat of a reliance, and it makes it harder for us to take something away once they've been using it and haven't developed other methods.

VICE CHAIR ELA: All right. I'm going to call for the vote.

The first thing, since this is a petition, we have a classification motion. That motion is to classify fatty alcohols, C6, C8, C10, C12 naturally derived fatty alcohol as synthetic.

The motion was originally made by Jesse

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

and seconded by Harriet. So --

MR. CHAPMAN: Didn't we --

VICE CHAIR ELA: -- Harriet, would you like --

MR. CHAPMAN: Didn't we classify this back in Florida?

VICE CHAIR ELA: As what?

MR. CHAPMAN: Didn't we classify this material in Florida when we voted on it last time?

VICE CHAIR ELA: A good question. We probably did.

MR. CHAPMAN: Oh, whatever. We can do it again. To be doubly sure.

VICE CHAIR ELA: I'm sure we did, actually, but we'll be redundant.

MR. MORTENSEN: Steve, could you quickly review the rules of voting in terms of how the counts are made?

VICE CHAIR ELA: So this is a petition that needs two-thirds to -- two-thirds majority to pass. And of course, if there are abstentions, that changes the -- the abstention counts -- doesn't

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

count into the total vote count. So if somebody abstains, it's the two-thirds of the people who actually voted, so -- even though abstention is an actual vote, I don't mean to take that away.

MR. MORTENSEN: Thank you.

VICE CHAIR ELA: So Harriet, can you -- so we're ready for the vote on classification.

CHAIR BEHAR: Does anybody remember where we ended yesterday?

(OFF-MIC COMMENTS)

CHAIR BEHAR: Thank you.

VICE CHAIR ELA: So I vote yes.

MR. RICE: Yes.

MS. OAKLEY: No.

MR. CHAPMAN: Sorry, this is a classification.

MS. OAKLEY: Sorry. Yes.

MR. BUIE: Yes.

MS. BAIRD: Yes.

MR. GREENWOOD: Yes.

MS. SWAFFAR: Yes.

MR. CHAPMAN: Yes.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. de LIMA: Yes.

DR. SEITZ: Yes.

MR. MORTENSEN: Yes.

DR. BRADMAN: Yes.

CHAIR BEHAR: Chair votes yes.

MR. RICE: That's 13 yes, one absence,
the motion passes.

VICE CHAIR ELA: Okay.

We'll move on to the National List
motion. The motion is to add fatty alcohols C6,
8 -- C6, C8, C10, C12 naturally derived fatty
alcohol at 205.601 for sucker control on organic
tobacco crops.

The motion was made by Jesse, seconded
by Rick.

CHAIR BEHAR: Voting starts with
Scott.

MR. RICE: Yes.

MS. OAKLEY: No.

MR. BUIE: Yes.

MS. BAIRD: Yes.

MR. GREENWOOD: Yes.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. SWAFFAR: Yes.

MR. CHAPMAN: Yes.

MS. de LIMA: Yes.

DR. SEITZ: Abstain.

MR. MORTENSEN: Abstain.

DR. BRADMAN: No.

VICE CHAIR ELA: Yes.

CHAIR BEHAR: Okay. I'm going to vote
no.

MR. RICE: The vote was 8 yes, 3 no,
2 abstain, 1 absent. The motion passes.

VICE CHAIR ELA: All right. Thank
you, everyone. I know that was a heartfelt
discussion.

So we are going to move on to the next
proposal, which is a petition for potassium
hypochlorite. Devon, would you like to read that?

MR. PATTILLO: Thanks, Steve.

Before the Board is a petition to add
potassium hypochlorite to the National List as a
chlorine material for organic crop production at
205.601(a)(2).

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

The petition was submitted by Enviro Tech Chemical Services Incorporated on November 8th, 2018 and later amended on March 26th, 2019.

A technical report was not requested by the Board, although technical reports for chlorine materials including sodium and calcium hypochlorite were prepared in 2006 and 2011 and are available on the NOP website. Thanks.

VICE CHAIR ELA: Asa's the lead on this, and I just want to point out we do have a slight technical clarification to the final motion, but I'll let Asa start off the discussion and then I'll make a motion to add the clarifications in.

DR. BRADMAN: Thank you, Steve.

So this petition is to add potassium hypochlorite to the National List for use in cleaning irrigation systems.

This material is very similar to other chlorine materials that are already on the list, including sodium hypochlorite bleach and calcium hypochlorite.

Like most compounds, this material is

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

an oxidizer sanitizer and is used -- can be used in a number of settings related to food safety, water -- pathogens in water, and other, you know, mechanical uses.

This petition was a proposal to use this material specifically for irrigation cleaning purposes, and we have attempted -- and we'll talk about the language on that in a bit -- to respond to that specific petition and address the question of -- certainly on that issue, using this for an irrigation water for cleaning irrigation systems.

There are some related uses with the development of FSMA, the Food Safety Modernization Act, and upcoming requirements for use of irrigation water and sanitation of irrigation water that touches crops in the preharvest and also post-harvest period.

This material is another chlorine compound, and because of that, it's raised concerns among different members of our community and, like chlorine compounds, for me, it also raises concerns.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Chlorine compounds are -- have occupational health issues. They're -- we know that sodium hypochlorite is an asthmogen, so it can cause permanent respiratory damage.

There's -- its' been classified as an asthmogen by the Association of Clinical -- I don't have it in my head, but anyway, it's been classified as an asthmogen. It's very likely that these other chlorine materials are also asthmogens, particularly because this is a very similar salt -- sodium hypochlorite.

It has potential implications in water for forming disinfection byproducts and other potential carcinogens like other chlorine compounds.

The flip side to this is that we already have some very similar chlorine compounds on the list and potentially having a broader toolbox has some advantages.

Relative to sodium hypochlorite, this material has as the cation potassium, which is potentially a plant nutrient, or at least it

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

wouldn't contribute to the increased salinity in soil.

It is true that the -- another material already on the list is calcium hypochlorite which would also avoid that increase -- potential increase in salinity related to sodium hypochlorite.

That said, this is another material.

It's very similar. It has some advantages over at least one of the materials we already have on the list, and you know, could be useful in the toolbox.

In terms of public comments, again, there's been concerns about this material as another chlorine compound and a feeling that we have not adequately evaluated the whole issue of sanitization and the use of sanitizers and disinfectants in the organic space.

A number of certifiers, QCS, the Ohio, OEFFA, have supported listing it. A number of farmers themselves have also voted in favor of this material.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

We also have kind of an issue with language. And Steve, I don't know if you want to go over that, or do you want me to?

So I think that kind of summarizes the pros and cons and the material as well.

VICE CHAIR ELA: So we did have some public comment that the petitioner as well as the committee neglected to add a -- there is no 205.601(2). We neglected to put the (a) in front of the (2).

And then also, in our past, it was clear from the petition as well as the committee that we were intending it for use in water for irrigation purposes only, not for an expanded use.

So I'm going to make a motion to amend the National List motion to add (a) between -- so it's 205.601(a)(2) and to add the word "only" in -- for use in water for irrigation purposes only.

DR. BRADMAN: Period.

VICE CHAIR ELA: So there is --

MR. CHAPMAN: I'll second that.

DR. BRADMAN: I'll second it.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

VICE CHAIR ELA: Yes.

MS. OAKLEY: So just for discussion purposes, so it was the Organic Produce Wholesalers Coalition that brought this to our attention, as we've already noted.

And just wanted to ask. They in their written comment suggested that we use the wording that we have under ozone gas, which is for uses in irrigation system cleaner only.

Does that change the intent of our proposal? Lisa?

DR. BRADMAN: No. I think that reflects the intention.

MS. OAKLEY: Should we do that for consistency, or is this adequate?

VICE CHAIR ELA: I would say -- and the reason I made the motion the way I did is ultimately it's up to the Program where they're going to list this and the final wording.

We're trying to make it clear that it is for irrigation purposes only, not for sanitizing and disinfecting. That was the intent of the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Committee.

I think in terms of the language for residual chlorine levels, that is in the higher section, but we wanted to be clear that it was going to follow the Safe Drinking Water Act.

But really that -- the wordsmithing is going to be done at the Program if they choose to take this to rule making.

We're just trying to make our intent clear to the Program. They will actually wordsmith it.

And I would ask before we take the vote of Devon and Paul, is this a substantial change that would -- do we need to send it back or can we vote on this?

DR. LEWIS: Sure. Thanks, Steve. And thanks in terms of clarifying in terms of how we're going to look at the recommendation, finding where it will be placed --

VICE CHAIR ELA: A little closer to the mic --

DR. LEWIS: Where it'll be placed in

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

the National List, and also just to remind is that in terms of what's being clarified here aligns with what was the intent of the petition.

So with that, we don't see this as a substantive change in terms of what's being changed here.

MS. SWAFFAR: So Steve, point of order.

Your motion that you made is different than the motion that is being projected on the screen.

You said to add it to 205.601(a)(2).

VICE CHAIR ELA: I'm sorry. I misspoke. I meant to substitute (a) for (2). It's up to the Program under which section of (1) through (9) they list it. But -- so it -- you can make the argument that it should be at number (9). It could go under (2).

I think we're trying to be just clear that this is where it gets added, so.

MS. SWAFFAR: So I hear grumblings in the crowd here, and I just want to go through this.

So 205.601(a) says algicides, disinfectants, and sanitizers, including

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

irrigation cleaning systems.

And then under (a) lists alcohols, chlorine materials, copper sulfate, all those things.

And so I think what the Committee is trying to do is say this is where it goes. It goes in (a), but we're not quite sure which one. It probably should go in (2) with an annotation there of what you've put residual chlorine levels and things like that.

So I see what you're doing and I think it's right, and I think the Program just has to -- I think it needs to go under (2) with that annotation.

But --

VICE CHAIR ELA: I would agree, but there's been discussion that it could be in its own --

MS. SWAFFAR: Yeah. It could be in number (9) or --

VICE CHAIR ELA: Yeah. Yeah.

MS. SWAFFAR: -- I think (9) is a little

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

more --

VICE CHAIR ELA: It could be a new -- an additional one. So to me, that -- this is up to the Program. We don't -- we as a Board recommend that the material be added. We don't get to say exactly when it does, so.

Tom and then Harriet.

MR. CHAPMAN: I think the intent here is quite clear, for irrigation purposes only, still needs to comply with the Safe Water Drinking Act.

And where it sits, you know, I'll leave that to the experts at the Program to figure out.

MALE SPEAKER: Thanks, Tom.

VICE CHAIR ELA: Harriet.

CHAIR BEHAR: When we submit it to the NOP with a cover sheet, we can explain why we didn't give it a number.

VICE CHAIR ELA: Can we move to the vote on the amendment? Harriet?

CHAIR BEHAR: We start the voting with Emily.

MS. OAKLEY: Yes.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. BUIE: Yes.

MS. BAIRD: Yes.

MR. GREENWOOD: Yes.

MS. SWAFFAR: Yes.

MR. CHAPMAN: Yes.

MS. de LIMA: Yes.

DR. SEITZ: Yes.

MR. MORTENSEN: Yes.

DR. BRADMAN: Yes.

VICE CHAIR ELA: Yes.

MR. RICE: Yes.

CHAIR BEHAR: Chair votes yes.

MR. RICE: That's 13 yes, one absence,
the motion passes.

VICE CHAIR ELA: Okay.

We'll move on with discussion of the
material as amended. Any further Board discussion
of whether to add this to the list or not?

Harriet?

CHAIR BEHAR: Since I will be leaving
the Board and we're going to be getting a lot of
new people, so we've all learned lessons to really

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

be looking closely at our annotations and just hope the new people, you know, the continuing Board members help the new Board members as they struggle with this kind of thing, too.

VICE CHAIR ELA: And I think we're just as bad.

(Laughter)

VICE CHAIR ELA: Any further discussion?

Asa?

DR. BRADMAN: Well, I just want to note that, you know, there's kind of a really outstanding concern about the review of sanitizers and disinfectants and the use of chlorine compounds.

And I know I have been a little bit torn about this material and adding another chlorine compound to the list.

At the same time, it's not that different from materials that are already there.

And in fact, some of them it may be perhaps less concerning, at least in terms of environmental impacts in some senses.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

So you know, part of it -- you know, one question that's been raised is, do we need it.

Is it just going to duplicate what's already there, particularly with respect to calcium hypochlorite?

You know, I don't think we should be looking at a sanitizer as a way to add a nutrient to plants. So the potassium hypochlorite, you know, I think the plus there is that it avoids sodium, not that it adds something positive to plants.

The flip side, you know, where I go back and forth on this, again, is that it's probably perhaps a little less concerning than some materials that we already have.

And you know, we often hear about the toolbox and that having another alternative might be helpful, especially with kind of emerging requirements that will result from the FSMA.

And so I -- our subcommittee was unanimous, actually, in supporting it, but I just want to kind of acknowledge that there's some hesitation about it, at least even on my part, and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

that there is, you know, a need, again, for this larger discussion about the use of sanitizers and disinfectants which are very powerful chemicals.

We talk about bleach and things like that. You know, they're in range of many other kinds of synthetic pesticides used in conventional agriculture that we are all concerned about.

VICE CHAIR ELA: Ashley?

MS. SWAFFAR: Yeah, thanks, Asa. But I do want to stress the importance of actually giving the farmers options in the toolbox. I've been very passionate about sanitizers and having options for growers to use because pathogen resistance is a real thing and FSMA is a real thing. And I feel like adding another tool for them in the toolbox is important.

VICE CHAIR ELA: All right.

I think we'll go ahead and move to the classification motion. The motion is to classify potassium hypochlorite as synthetic. It was -- the motion was made by myself, and it was seconded by Dan.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Harriet?

CHAIR BEHAR: We will begin the voting with Jesse.

MR. BUIE: Yes.

MS. BAIRD: Yes.

MR. GREENWOOD: Yes.

MS. SWAFFAR: Yes.

MR. CHAPMAN: Yes.

MS. de LIMA: Yes.

DR. SEITZ: Yes.

MR. MORTENSEN: Yes.

DR. BRADMAN: Yes.

VICE CHAIR ELA: Yes.

MR. RICE: Yes.

MS. OAKLEY: Yes.

CHAIR BEHAR: Chair votes yes.

MR. RICE: That's 13 yes, 1 absent, the motion passes.

VICE CHAIR ELA: We'll move on to the National List motion. The motion is to add potassium hypochlorite at 205.601(a), chlorine materials for use in water for irrigation purposes

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

only, residual chlorine levels in the water and direct crop contact or as water from cleaning irrigation systems applied to soil must not exceed the maximum residual disinfectant limit under the Safe Drinking Water Act.

I think I got that in one breath. But motion's by myself, seconded by Rick.

CHAIR BEHAR: No other discussion.
Voting begins with Sue.

MS. BAIRD: Yes.

MR. GREENWOOD: Yes.

MS. SWAFFAR: Yes.

MR. CHAPMAN: Yes.

MS. de LIMA: Yes.

DR. SEITZ: Yes.

MR. MORTENSEN: Yes.

DR. BRADMAN: Yes.

VICE CHAIR ELA: Yes.

MR. RICE: Yes.

MS. OAKLEY: Yes.

MR. BUIE: Yes.

CHAIR BEHAR: Chair votes yes.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. RICE: That's 13 yes, 1 absent, the motion passes.

VICE CHAIR ELA: Thank you, everyone. Those are the end of the petition material proposals. We're going to move on into our sunset reviews for crops.

The first one is hydrogen peroxide. Devon, could you read hydrogen peroxide in?

MR. PATILLO: Thanks, Steve.

At Section 205.601(a), as algicide disinfectants and sanitizer including irrigation system cleaning systems -- the listing is for hydrogen peroxide.

VICE CHAIR ELA: Jesse, I believe this is yours.

MR. BUIE: Hydrogen peroxide is widely used as a disinfectant and bleaching agent. It is effective and environmentally benign substance used to reduce and control microorganisms in food safety purposes.

It is critical for sanitizing aseptic packaging. It is a weak but a strong oxidizer and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

makes it very useful as a fungicide, cleaning agent, and for disease control.

Technical report was commissioned in 2015 for hydrogen peroxide since the information from the previous 1995 TAP was old and incomplete.

It showed that hydrogen peroxide is inherently unstable and breaks down readily into oxygen and water.

During the spring 2019 NOSB meeting, the Crops Committee received comments in favor of relisting hydrogen peroxide and no comments against delisting.

Comments include that hydrogen peroxide is an effective microbial pesticide used in an orchard setting for the sanitation of equipment such as picking bags and pruning shears.

It is also used as an algicide and disinfectant including for irrigation system cleaning.

With a loss of antibiotics, hydrogen peroxide has become an extremely important tool in controlling fire blight in both organic apples

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

and pears.

Are there any questions?

VICE CHAIR ELA: Discussion?

All right. We will move to the vote.

The vote is -- this is -- I'm trying to find where I am. It's whether to relist hydrogen peroxide. So the motion is to remove hydrogen peroxide from 205.601(a) of the National List based on the following criteria, in OFPA and or C -- 7 C.F.R. 205.601(b).

Harriet.

CHAIR BEHAR: Voting begins with Rick.

MR. GREENWOOD: No.

MS. SWAFFAR: No.

MR. CHAPMAN: No.

MS. de LIMA: No.

DR. SEITZ: No.

MR. MORTENSEN: No.

DR. BRADMAN: No.

VICE CHAIR ELA: No.

MR. RICE: No.

MS. OAKLEY: No.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. BUIE: No.

MS. BAIRD: No.

CHAIR BEHAR: Chair votes no.

MR. RICE: That's 13 no, 1 absent, the motion fails.

VICE CHAIR ELA: Rick, you did well on remembering to vote no to keep it relisted. So congratulations.

We will move on to ammonium soaps. Devon, could you read those in?

(OFF-MIC COMMENTS.)

VICE CHAIR ELA: Oh, I'm sorry, there's a second part, right. Can you do hydrogen peroxide for the second part of it? I'm sorry.

MR. PATTILLO: Thanks.

Continuing with the same substance but in Section 205.601(i) as plant disease control. The listing is 5 hydrogen peroxide.

MR. BUIE: Okay.

And again, hydrogen peroxide is widely used as a disinfectant and bleaching agent. The rest of the information is the same.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

So are there any questions?

VICE CHAIR ELA: Any discussion from the Board?

Sue, is that a -- yeah.

MS. BAIRD: I don't know how to do this, but it says 205.601(a) on our motion instead of 205.601(i).

VICE CHAIR ELA: Yeah. We might need the next -- so that --

MS. BAIRD: It is in the (i) section.

VICE CHAIR ELA: Correct.

This should be because we just did 205.601(a).

MS. ARSENAULT: I'll double-check that the actual proposal is correct. this is just for display.

VICE CHAIR ELA: Yeah. It should be (i) is the second part of this.

MR. CHAPMAN: It's not in our packet. In the packet it says (a), not (i).

VICE CHAIR ELA: So we have two (a)s in the packet?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. CHAPMAN: We've got two (a)s.
Yes.

VICE CHAIR ELA: Harriet?

(OFF-MIC COMMENTS.)

MS. SWAFFAR: Looks like in the packet that we received that the proposal, it maybe just copied over and the motion says (a) --

VICE CHAIR ELA: Yes, it should -- it was copied over obviously. It should be (i). Do we need a clarification on that?

MS. SWAFFAR: I have a feeling that you probably said (i) in subcommittee, so I'm good with it.

VICE CHAIR ELA: We intended to vote (i) for sure, so. So this would be 205.601(i) as Devon pointed out in reading it in.

Is there any issue on the Board to proceeding with 205.601(i)? Okay.

So the motion is to remove hydrogen peroxide from 205.601(i) of the National List based on the following criteria in OFPA in 7 C.F.R. 205.601(b).

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

The motion was made by Jesse, seconded by Harriet.

CHAIR BEHAR: We'll begin the voting with Ashley.

MS. SWAFFAR: No.

MR. CHAPMAN: No.

MS. de LIMA: No.

DR. SEITZ: No.

MR. MORTENSEN: No.

DR. BRADMAN: No.

VICE CHAIR ELA: No.

MR. RICE: No.

MS. OAKLEY: No.

MR. BUIE: No.

MS. BAIRD: No.

MR. GREENWOOD: No.

CHAIR BEHAR: Chair votes no.

MR. RICE: That's 13 no, 1 absent, the motion fails.

VICE CHAIR ELA: And as we noted, it's the older Board members that sometimes make the mistakes. Thank you for that catch.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Okay. Now we will move on to ammonium soaps. Devon, could you read that in?

MR. PATTILLO: Thanks.

This listing is 205.601(d) as animal repellants, soaps, ammonium for use as a large animal repellent only, no contact with soil or edible portion of crop.

VICE CHAIR ELA: Rick, this is your lead?

MR. GREENWOOD: Yeah. Ammonium soaps are used as animal repellants to protect organically produced crops from unwanted browsing primarily from deer and rabbits.

And as we heard yesterday in one of the comments, used in Washington State to protect apple orchards in particular.

Fatty acids are broken down and esterified into soaps with ammonia. They have a very short half-life in the environment.

In fact, they can't do long-term studies because they degrade actually within a day, have low toxicity. EPA has placed them in the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

toxicity category for lowest available classification.

We had no comments for removal and about 10 comments for keeping them on the list, so very benign substances.

VICE CHAIR ELA: Any Board discussion?

Okay. With that, we'll move to the vote.

There is a motion to remove soaps ammonium from 205.601 the National List based on the following criteria in OFPA and/or 7 C.F.R. 205.601(b). Motion was made by Rick, seconded by Emily.

CHAIR BEHAR: We'll begin the voting with Tom.

MR. CHAPMAN: No.

MS. de LIMA: No.

DR. SEITZ: No.

MR. MORTENSEN: No.

DR. BRADMAN: No.

VICE CHAIR ELA: No.

MR. RICE: No.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. OAKLEY: No.

MR. BUIE: No.

MS. BAIRD: No.

MR. GREENWOOD: No.

MS. SWAFFAR: No.

CHAIR BEHAR: Chair votes no.

MR. RICE: That's 13 no, 1 absent, the motion fails.

VICE CHAIR ELA: Okay.

We will move on to horticultural oils.

The -- this horticultural oils has two listings, so we'll start with the first.

MR. PATTILLO: Thanks, Steve.

In Section 205.601(e), as insecticides including acaricides or mite control, the listing is 7, oils horticultural, narrow range oils as dormant, suffocating, and summer oils.

VICE CHAIR ELA: This is one of my materials. Basically, horticultural oils form one of the backbones of organic production systems especially in tree fruits, although I find it very interesting that in public comments we also

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

received comments they're used to control bugs in soybean, leaf fungus, and banana. They're listed for a wide variety of crops.

You know, basically comments are that they're a key essential component of disease and pest control programs in organic systems.

We did have one comment that the listing for horticultural oils should be annotated in a way that limits use to central situations and protects workers from inhalation hazards and non-target arthropods from harm.

But -- so take that into consideration, but they are -- they -- I can speak from many years of experience they are very soft, they don't disrupt our integrated system, and they are very useful on organic systems.

Any comments from the Board?
Discussion?

All right. We will move to the vote.

DR. BRADMAN: Steve?

VICE CHAIR ELA: Yes, Asa?

DR. BRADMAN: Sorry. I just want to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

make --

VICE CHAIR ELA: Go ahead.

DR. BRADMAN: -- a comment.

Just kind of a reminder that this is derived from petroleum and that, you know, in organic setting, we have some concerns about using petroleum, petrochemicals in agriculture.

I think it would be great if there was some incentive to look for alternatives. There's some discussion about vegetable oils and the need for petroleum-based emulsifiers in that and also efficacy and concerns about phytotoxicity, and maybe that does preclude the use of some vegetable oils.

But I just think we should acknowledge that this is a, you know, a very substantial use.

In California, horticultural oils are probably one of the most heavily used pesticides.

In terms of putting it in the soil, I think it's a ratio of maybe one to six if we look at the petroleum content. For example, biodegradable mulches, it's a six -- about a sixth

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

of that at least in the most heavily used crops in California based on the pesticide use reporting data.

So I just -- you know, I'm going to vote for it, but we should all realize that we're using it -- heavily used petrochemical here and that it would be great if there were a viable alternative.

VICE CHAIR ELA: Thank you, Asa.

Anybody else?

Okay. We'll move to the motion. Motion to remove horticultural oils from 205.601(e) of the National List based on the following criteria and OFPA and 7 C.F.R. 205.600(b). Motion was made by myself and seconded by Dave.

Harriet.

CHAIR BEHAR: The voting begins with Lisa.

MS. de LIMA: No.

DR. SEITZ: No.

MR. MORTENSEN: No.

DR. BRADMAN: No.

VICE CHAIR ELA: No.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. RICE: No.

MS. OAKLEY: No.

MR. BUIE: No.

MS. BAIRD: I want to acknowledge Asa.

I appreciate your knowledge. Thank you for giving us backgrounds on some of these things. You can't do that?

VICE CHAIR ELA: Well --

MS. BAIRD: Okay.

VICE CHAIR ELA: -- we had chance for discussion before. So continue with the voting.

MR. GREENWOOD: No.

MS. SWAFFAR: No.

MR. CHAPMAN: No.

CHAIR BEHAR: Chair votes no.

MR. RICE: That's 13 no, 1 absent, the motion fails.

VICE CHAIR ELA: So we have a second listing for horticultural oils. Hopefully we got the right this time. Yes.

Devon?

MR. PATTILLO: Thanks.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Moving to Section 205.601(i) as plant disease control. The listing is 7, oils horticultural, narrow range oils as dormant, suffocating, and summer oils.

VICE CHAIR ELA: Again, this is my lead, and I would just say ditto on the discussion that we already had widely used essential and organic production.

Sue, if you would like to make a comment, this would be a great chance.

MS. BAIRD: Thank you, Asa. Your knowledge about all these products really helps me, at least, to make an informed decision. I just want to acknowledge that in public.

DR. BRADMAN: Thank you.

VICE CHAIR ELA: Harriet.

CHAIR BEHAR: And I also appreciate the discussion that we would like to see natural alternatives to the petroleum products.

DR. BRADMAN: If somebody could come up with a product that's as effective and as natural, they could probably get very rich.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

VICE CHAIR ELA: Yep. Yeah.

I will say that it is very fascinating how the oils have changed, you know, in the last 20 years. So the refinement is where we can use them in summer and the phytotoxicity has gone down significantly from what they used to be, so.

Any further discussion?

Okay. We'll move to the motion. The motion is to remove horticultural oils from 205.601(i) of the National List based on the following criteria in OFPA and/or 7 C.F.R. 205.600(b).

Motion was made by myself, seconded by Harriet.

CHAIR BEHAR: And the voting begins with Dan, who's like in the starting gate there.

DR. SEITZ: No.

MR. MORTENSEN: No.

DR. BRADMAN: No.

VICE CHAIR ELA: No.

MR. RICE: No.

MS. OAKLEY: No.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. BUIE: No.

MS. BAIRD: No.

MR. GREENWOOD: No.

MS. SWAFFAR: No.

MR. CHAPMAN: No.

MS. de LIMA: No.

CHAIR BEHAR: Chair votes no.

MR. RICE: That's 13 no, 1 absent, the motion fails.

VICE CHAIR ELA: Okay.

The next listing is for pheromones. Devon?

MR. PATTILLO: thanks.

This listing is at Section 205.601(f) as insect management pheromones.

VICE CHAIR ELA: I am again the lead on this, and pheromones are used to do several things for the organic crop producer. They help to monitor pest pressures and used in trapping and monitoring extensively. It really gives us the decision tools to decide if we need to have a control situation.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

And then they are also used especially in palm fruits, apple, pear growers to disrupt mating of codling moth and leafrollers, and they're also used in a number of other systems, too, as a mating disruption tool.

They are a very key component, very selective to those specific insects and are widely used, in fact, are now widely in the conventional industry as well. That came out of the organic situation.

So with that, I'll open it up to Board discussion.

All right. Motion is to remove pheromones from 205.601(f) of the National List based on the following criteria in the Organic Foods Production Act and/or 7 C.F.R. 205.600(b).

The motion was made by myself. It was seconded by Dave.

Harriet?

CHAIR BEHAR: We begin the voting with Dave.

MR. MORTENSEN: No.

DR. BRADMAN: No.

VICE CHAIR ELA: No.

MR. RICE: No.

MS. OAKLEY: No.

MR. BUIE: No.

MS. BAIRD: No.

MR. GREENWOOD: No.

MS. SWAFFAR: No.

MR. CHAPMAN: No.

MS. de LIMA: No.

DR. SEITZ: No.

CHAIR BEHAR: Chair votes no.

MR. RICE: That's 13 no, 1 absent, the motion fails.

VICE CHAIR ELA: Next item up is ferric phosphate. Devon?

MR. PATTILLO: The listing is Section 205.601(h) as slug or snail bait, ferric phosphate CAS number 10045-86-0.

VICE CHAIR ELA: Dave is the lead on this.

MR. MORTENSEN: Yeah. So we -- ferric

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

phosphate is used for -- as a molluscicide for slug and snail suppression. It's something that would be applied to the soil surface, ingested by the slugs and snails and disrupts their digestive system.

Ferric phosphate is a compound that occurs naturally in the soil at low concentrations.

The difference with this product is that it would be applied at a higher concentration in the background level in the soil.

It's quite effective, as we heard from one of the public commenters yesterday. They're -- I actually went back and looked at what we had spent actually quite a bit of time on this for review. And the efficacy data is clear as are the 13 public comment notes that we got out of 14 that supported relisting ferric phosphate from farmers across the country from the Pacific Northwest to the Vermont farmers, et cetera, that they're finding it useful.

In those public comments and something that a number of us had observed in farms where

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

we've seen it used, we are seeing increased amount of organic matter on the surface as a cropping systems approach that arises in part from reduced tillage organic and as well as heavier reliance on more cover crop biomass.

The downside of that increased organic matter on the surface or near the surface is that it creates ideal habitat for mollusks particularly in wetter, cooler years.

A technical review was written in 2012, and the subcommittee asked for additional clarification in the form of a technical review that would look at this material again with particular attention to such things as the non-target effects of the compound, the efficacy of the compound, and the extent to which it's used.

That was conducted by the USDA ARS scientists.

And you heard yesterday quite a protracted discussion about whether the chelating agent that's part of the formulated product but not ferric phosphate itself has an impact on the efficacy, and I will just say that the data on that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

are equivocal, that some papers report that it does enhance its activity quite a bit and that others, that effect is nominal.

I would say that one of the biggest concerns that we had in discussing this were the non-target effects given the great focus of organic farmers on soil quality, which would also include the soil biodiversity and biota, so the non-target effects.

One paper indicated there were such non-target effects, and we were unable to see other evidence in the peer reviewed published literature that would suggest otherwise.

It is the case that the snail and -- snails and slugs are a big problem, and one that farmers clearly are saying, you know, this product is being used and used quite a bit where the problem exists in a therapeutic way as opposed to just routinely applying it. So you would see that you have a slug problem, and the application of this material would be made.

I don't know that I should speak to the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

split vote -- or it's not split. We had several folks vote to abstain based on my -- our review and my experience with this problem in the field and then -- and my concerns that farmers dealing with this problem was underwritten by 13 of the 14 comments that we received in this most recent commenting period leads me to vote that we would be -- I'm not sure that I need to reveal my vote, but I am supportive of this going forward and relisting.

VICE CHAIR ELA: Thank you, Dave.

Board discussion?

Dan?

DR. SEITZ: I just have a question for the farmers on the Board if they have a thought on this.

Do they use other methods besides this for controlling slugs and mollusks and how necessary a substance is this in their experience?

VICE CHAIR ELA: Rick.

MR. GREENWOOD: Okay.

I'm a -- Okay. I'm a user of Sluggo,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

and I find it to be effective. The downside is it's expensive. So that's the downside for me. But beyond that, no, it does good control for mollusks.

VICE CHAIR ELA: Sue?

MS. BAIRD: I was going to say we don't have the problems with slugs or snails. We have some, but not nearly like they do in California. So I think this may be regional, perhaps.

MR. BUIE: Yeah, it's not a big problem for me, so I don't --

VICE CHAIR ELA: We grow things above ground.

(Laughter.)

MR. MORTENSEN: And maybe just to Dan's question based on the public comment, we had public comments where growers in the Pacific Northwest are using it -- you know, it's used a fair bit. And we had quite a few comments from the northeast and I know from working with farmers in Pennsylvania it's used widely there and actually at a PCO note testing to that fact as well. Yeah.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

VICE CHAIR ELA: Harriet, and then Tom.

CHAIR BEHAR: On my farm, we don't need it. We don't use it. That doesn't mean that other people might need it.

VICE CHAIR ELA: Tom.

MR. CHAPMAN: I also just want to point out that 205.206 requires that cultural mechanical means be exhausted first before you move on to other substances.

So built into the rule is a requirement to try alternative methods before you have to resort to the National List.

VICE CHAIR ELA: Rick, and then Sue.

MR. GREENWOOD: Yep. As opposed to you, I have snails that climb trees.

(Laughter.)

MR. GREENWOOD: And they get on the bugs and --

VICE CHAIR ELA: Closer to your mic.

MR. GREENWOOD: Oh, yeah. And they get on the bugs, so they do climb. They're California snails.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

VICE CHAIR ELA: Oh, goodie. I get to go home and have more worries. Thanks, Rick.

Sue.

MS. BAIRD: Yeah. I just want to iterate that when I lived in San Diego when I was working, the snails I could not believe. They're just horrific. It's something we need to be cognizant of. We're not a reviewer for our section of the United States. We're a reviewer for a national and then indeed international.

VICE CHAIR ELA: Tom.

MR. CHAPMAN: I just was curious to know if Rick has considered escargot as a secondary crop to --

(Laughter.)

MR. GREENWOOD: No, but I did try little trays of beer, which people said might drown the snails, but that didn't really work very well.

(Simultaneous speaking.)

MR. CHAPMAN: You just had really happy snails?

VICE CHAIR ELA: Asa.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(Laughter.)

VICE CHAIR ELA: Asa.

DR. BRADMAN: I don't use ferric and Sluggo -- ferric phosphate personally, but I do put it in my garden, which in some ways is a little farm.

And it definitely does work and it's important. We did recently last year approve another molluscicide, sulfur compound. And this is applied as a pellet. And it's mostly on the surface, so I wonder as it works into the soil whether, you know, it might be deluded to a factor that it might not actually increase, you know.

I wonder what the impact is but definitely snails and slugs on the West Coast are a big issue I know among many organic farmers I know.

And just to comment on the California snails, I think they're actually from Spain. It just speaks to the issue of invasive species and the pest pressures that they can create.

VICE CHAIR ELA: All right. Unless

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

somebody needs to do something to change their vote,
we'll move on.

There is a motion to remove ferric phosphate from the National List at 205.601 based on the following criteria in OFPA and/or 7 C.F.R. 205.600(b). The motion was made by Dave and seconded by Harriet.

Harriet?

CHAIR BEHAR: Begin the voting with Asa.

DR. BRADMAN: No.

VICE CHAIR ELA: No.

MR. RICE: No.

MS. OAKLEY: No.

MR. BUIE: No.

MS. BAIRD: No.

MR. GREENWOOD: No.

MS. SWAFFAR: No.

MR. CHAPMAN: No.

MS. de LIMA: No.

DR. SEITZ: No.

MR. MORTENSEN: NO.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

CHAIR BEHAR: Chair votes no.

MR. RICE: That's 13 no, 1 absent, the motion fails.

VICE CHAIR ELA: Okay. We'll move next to potassium bicarbonate. Devon?

MR. PATTILLO: At Section 205.601(i) as plant disease control, the listing is for potassium bicarbonate.

VICE CHAIR ELA: Emily, this is your lead.

MS. OAKLEY: Thank you.

So yes, this is a plant disease control material, and it's used on a wide variety of crops for a wide variety of diseases.

It decomposes as potassium carbonate, water, and carbon dioxide. It's considered to be more environmentally friendly than many of the other alternatives, but it is a mild respiratory and eye irritant.

The TR does provide possible alternative materials or practices, however we're received substantial written and oral comment on

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

this material over the last two meetings from a wide diversity of stakeholders who augment the fact that this is of low toxicity and readily available for disease control.

It -- we've also had some commenters respond that this is part of a rotation of materials and that it can be important later in the season when alternatives may hurt the crop.

So yes, we've had widespread continued expressed support for this material. It's used in the field, high tunnel, greenhouses, and is employed, as I noted, as a material in rotation.

One commenter expressed that it is not funny -- fit any OFPA criteria or categories of allowable synthetics. But the overwhelming majority of commenters are in widespread support of this use.

VICE CHAIR ELA: Discussion?

All right. We'll move to the motion.

The motion to remove potassium bicarbonate from 205.601(i) based on the following criteria in OFPA and/or 7 C.F.R. 205.601(b). The motion was made

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

by Emily, seconded by Dave.

Harriet?

CHAIR BEHAR: Voting begins with
Steve.

VICE CHAIR ELA: No.

MR. RICE: No.

MS. OAKLEY: No.

MR. BUIE: No.

MS. BAIRD: No.

MR. GREENWOOD: No.

MS. SWAFFAR: No.

MR. CHAPMAN: No.

MS. de LIMA: No.

DR. SEITZ: No.

MR. MORTENSEN: No.

DR. BRADMAN: No.

CHAIR BEHAR: Chair votes no.

MR. RICE: That's 13 no, 1 absent, the
motion fails.

VICE CHAIR ELA: We will move on to
magnesium sulfate. Devon?

MR. PATTILLO: Thanks, Steve.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

At Section 205.601(j) as a plant or soil amendment, the listing is magnesium sulfate allowed with the documented soil deficiency.

VICE CHAIR ELA: Emily, this is yours.

MS. OAKLEY: Thank you.

It's used to correct for magnesium soil deficiencies and helps to improve the uptake of nitrogen and phosphorous by crops, helps seeds germinate, increase chlorophyll production and aids in the production of flowering.

It can be attained from naturally occurring sources or can be manufactured by a chemical process. Historically, there have been commercially available products containing mined no raw mineral magnesium sulfate in bulk quantities suitable for agriculture.

And for this reason, the production of synthetic magnesium sulfate has been necessary.

It is actively used by stakeholders and continues to be considered necessary for the production of fruit and vegetables.

We've had, again, in both meetings,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

extensive written and oral testimony expressing continued support for this material stating that it's important in high tunnels and greenhouses as well as fruit tree production.

Some growers commented that dolomite is not a suitable substitute in all cases as it cannot be used in high pH soils, nor as a foliar application.

Magnesium sulfate is also used in high pH soils when sulfur is needed but growers do not want to increase the pH.

So we did get some new comments this round, but they all tended to be reflective of those received in the spring.

Some noted that the annotation on this listing is important because it emphasizes rock patterns as the primary source but allows for magnesium sulfate in an emergency and that it's also important that required documented deficiency is required.

One commenter noted that it shouldn't be necessary in biologically active soils but that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

it's acceptable only under limited circumstances.

Another commenter noted that magnesium sulfate is not taking the place of soil building and that it is critical to fruit tree production and again, that dolomite is not viable in high pH northwestern, especially Pacific soils.

So the continued support for this material remains, and any questions?

VICE CHAIR ELA: Board discussion?

I will just add in that, yeah, I would echo that even in soils that are high magnesium, for example we have high calcium soils and we can still have calcium deficiency in the fruit. It's just because of the way the nutrients are moved within the crop that even though it's adequate in the soil it may not be adequate in the crop. So some of these materials are actually, even though it seems like we shouldn't need them, we have very active soils that can be actually quite critical to the nutritional quality of the crop.

Without further discussion, we'll move to the motion. Motion is to remove magnesium

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

sulfate from 205.601(j) based on the following criteria in OFPA and/or 7 C.F.R. 205.600(b).

I feel like I'm on one of those radio ads, you know, how fast can you say it.

But motion by Emily, seconded by Asa. Harriet?

CHAIR BEHAR: Voting begins with Scott.

MR. RICE: No.

MS. OAKLEY: No.

MR. BUIE: No.

MS. BAIRD: No.

MR. GREENWOOD: No.

MS. SWAFFAR: No.

MR. CHAPMAN: No.

MS. de LIMA: No.

DR. SEITZ: No.

MR. MORTENSEN: No.

DR. BRADMAN: No.

VICE CHAIR ELA: No.

CHAIR BEHAR: Chair votes no.

MR. RICE: It's 13 no, 1 absent, the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

motion fails.

VICE CHAIR ELA: All right. Next material is hydrogen chloride. Devon.

MR. PATTILLO: Moving to the last listing in 205.601 Section 205.601(n), seed preparations. The listing is hydrogen chloride, CAS number 7647-01-0 for delinting cotton seed for planting.

VICE CHAIR ELA: And even though this shows the motion was made by myself, it was because Asa was absent that day in subcommittee, so Asa, are you the -- you're the lead on this, aren't you?

DR. BRADMAN: Yes. Yes.

I wish all the compounds were as easy as hydrogen peroxide --

VICE CHAIR ELA: Can you move a little closer to the mic, Asa?

DR. BRADMAN: I wish all the compounds were as easy as hydrogen peroxide or manure ash.

But so hydrogen chloride is being -- is up for relisting. The primary use of this material is for delinting copper -- not copper,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

cotton seed and enable it to be more easily handled for planting.

It's been -- we've had a number of comments on this -- on its importance to the organic cotton industry in the U.S.

I want to just point out a few things about this material. One, it's not just being used for delinting. The -- in the public comments submitted now and in discussions I had with I think Dr. Dever, who's based in the south and helps support cotton, the cotton industry, some other important functions of the material is control of blight or other pathogens on the cotton seed.

It also tends to break dormancy on cotton seed particularly if it's been imported from the southern hemisphere and it's being used for planting the use of the hydrogen chloride, basically kicks it out of dormancy.

So it's being -- it's been listed for delinting cotton seed. But it also serves other important functions that probably should be acknowledged at least in the record.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Universally, there is actually support for this material with the understanding that it's essential for treating cotton seed and really enables the cotton industry, the organic cotton industry and agriculture in the United States.

Concerns about this relate to many comments and concerns we have about chlorine compounds. It forms hydrochloric acid in the process, and as we know, chlorine compounds have a lot of human health and potential environmental impacts.

Of course, if it's handled properly and used properly, it's not likely to get into the environment, and of course, if -- workers should not be exposed if it's handled properly.

We've had some discussions about alternatives and there's been some research supported by the USDA on mechanical or perhaps other methods to treat the cotton seed in a way that it can be used -- can be handled appropriately for planting.

Although that nut does not necessary

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

get at issues around dormancy and pathogens. So there is these other secondary functions of the hydrogen chloride that seem to be essential for the use of the seed.

The -- let's see. The last thing, you know, there is kind of a call in many of the comments about the need for more research for alternatives.

And I should say we included that in the review here. And as a subcommittee, we supported the need for more research.

But I just also want to mention that when we came up with research priorities for this year, this kind of fell off the list partly because it seems like some of the other categories were higher priority and we felt like our research priority list was getting to long.

But maybe this is something we want to revisit -- the Board wants to revisit in 2020 about putting our voice in for research on alternatives to this material beyond just to state that in the sunset review.

Thanks.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

VICE CHAIR ELA: Board discussion?

Ashley.

MS. SWAFFAR: Yeah. Thanks, Asa.

I just want to point out that I believe that the other things that you talked about this could be used for are probably secondary benefits of the delinting of the cotton because this annotation is strictly for delinting cotton seed and no other use allowed.

DR. BRADMAN: I understand. I agree that they're secondary, but it seems like they're also essential.

VICE CHAIR ELA: I think the real issue is you're delinting them and then you're using it for delinting and you also get these secondary effects from the delinting process.

So Harriet.

CHAIR BEHAR: I had the privilege of reading IOIA organic fiber training quite a few years ago now. But we spent a week around Lubbock, Texas and went to organic cotton farms and non-organic cotton farms and really learned a lot

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

about cotton growing.

And the process of non-organic cotton growing is extremely chemical intensive, to the point that right before they harvest the cotton, they come in and spray paraquat on the open cotton balls and then harvest the cotton.

So we really need to be supporting organic cotton production in the United States, and actually there's a lot of farmer and farm worker health problems around cotton production.

So I support this material.

VICE CHAIR ELA: Dave.

MR. MORTENSEN: Steve, since we were -- since we reworked the research priorities, we lumped a couple of things, the disease class into one larger group and then tried to reorganize that.

And I think we could do the same at the chlorine materials and alternatives in a way that Asa's suggesting we might.

VICE CHAIR ELA: Yep.

Sue?

MS. BAIRD: Yeah, I just wanted to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

reiterate what Ashley said. This is specifically for delinting cotton seed for planting. It would be up to a certifier and inspector to verify that they're not using it for other purposes. This is specifically annotated for delinting the cotton seed.

VICE CHAIR ELA: Yeah. I don't -- my understanding wasn't used separately. In the delinting process, you also got these other benefits. But we'll move to the motion unless there's more discussion.

The motion is to remove hydrogen chloride for delinting cotton seed for planting based on the following criteria in OFPA and/or 205.601(n) seed preparations if applicable.

Motion was made by myself, seconded by Harriet.

Harriet?

CHAIR BEHAR: We begin the voting with Emily.

MS. OAKLEY: No.

MR. BUIE: No.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. BAIRD: No.

MR. GREENWOOD: No.

MS. SWAFFAR: No.

MR. CHAPMAN: No.

MS. de LIMA: No.

DR. SEITZ: No.

MR. MORTENSEN: No.

DR. BRADMAN: No.

VICE CHAIR ELA: No.

MR. RICE: No.

CHAIR BEHAR: Chair votes no.

MR. RICE: That's 13 no, 1 absent, the motion fails.

VICE CHAIR ELA: Okay. We'll move on to ash for manure burning.

MR. PATTILLO: Thanks, Steve.

We're now moving to substances at Section 205.602 of the National List which includes the non-synthetic substances that are prohibited for use in organic crop production.

It's section 205.605(b). The listing is ash for manure burning.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

VICE CHAIR ELA: Harriet is the lead.

CHAIR BEHAR: Yeah, so this received universal public comment to remain as a prohibited natural. We did receive one public comment after the spring meeting that came directly to the Board and didn't go through the public comment process from a manufacturer of ash from manure burning and said that it could be a very beneficial source of some micronutrients.

However, that doesn't change how this material is produced. It removes the carbon from manure and we all view that as an important aspect of the use of manure.

In addition, typically this ash is -- comes from industrial large scale farms because they don't have enough land base or it's too difficult or expensive to move the manure from there to land for crop growing, and so they burn it.

And I think in organic agriculture, we highly value manure for all the benefits that it can offer to us and building humus and sequestering carbon.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

So that is the -- any other comment from the Board on that? That's the summary.

VICE CHAIR ELA: Board discussion?

All right. We'll move to the motion.

Motion to remove ash from manure burning from 205.602 of the National List based on the following criteria in OFPA and/or 7 C.F.R. 205.600(b).

Motion was made by Harriet, seconded by Jesse.

CHAIR BEHAR: And we begin the voting with Jesse.

MR. BUIE: No.

MS. BAIRD: No.

MR. GREENWOOD: No.

MS. SWAFFAR: No.

MR. CHAPMAN: No.

MS. de LIMA: No.

DR. SEITZ: No.

MR. MORTENSEN: No.

VICE CHAIR ELA: No.

MR. RICE: No.

MS. OAKLEY: No.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. GREENWOOD: No.

CHAIR BEHAR: Chair votes no.

MR. RICE: 13 no, 1 absent, the motion fails.

VICE CHAIR ELA: Okay. The final sunset for crops is sodium fluoaluminate.

MR. PATTILLO: At Section 205.602(g), the listing is sodium fluoaluminate (mined).

VICE CHAIR ELA: Dan, this is your lead.

DR. SEITZ: So sodium fluoaluminate is a non -- as mentioned, non-synthetic substance prohibited for use by inorganic crop production. It's been prohibited since 1996.

It's a mined substance and is -- in agriculture is primarily used as a insecticide to control a variety of pests including various weevils, leafrollers, various moth and worm species and grey skeletonizers.

The reason it is forbidden is because of the potential toxicity of sodium fluoaluminate due to the release of fluoride into the environment.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

And I just want to add one interesting historic note. Just 24 miles from here was 70 years ago one of the largest industrial accidents in the United -- history of the United States with a death of 70 people in a town of 1400 due in large part to the release of fluorine gas in an industrial accident, and that was trapped because of an environmental inversion and actually led later on to the creation of laws to protect clean air. So interesting that we're close to that.

VICE CHAIR ELA: Board discussion?

All right. The motion to remove sodium fluoaluminate mined from 205.601 -- 205.602 of the National List based on following criteria in OFPA and/or 7 C.F.R. 205.600(b). Motion was made by Dan. It was seconded by Jesse.

CHAIR BEHAR: Voting begins with Sue.

MS. BAIRD: No.

MR. GREENWOOD: No.

MS. SWAFFAR: No.

MR. CHAPMAN: No.

MS. de LIMA: No.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

DR. SEITZ: No.

MR. MORTENSEN: No.

DR. BRADMAN: No.

VICE CHAIR ELA: No.

MR. RICE: No.

MS. OAKLEY: No.

MR. BUIE: No.

CHAIR BEHAR: Chair votes no.

MR. RICE: That's 13 no, 1 absent, the motion fails.

VICE CHAIR ELA: All right. The final item on the crops agenda is a discussion document for paper plant pots and other crop production aids. It is a petition. This is strictly discussion document. We won't be taking a vote today.

Harriet is the lead on this. I'm just going to note we really only have five minutes more of our time left, but I'd ask the chair to give us maybe an extra five minutes if we need it, so.

CHAIR BEHAR: I'm easy.

(Laughter.)

VICE CHAIR ELA: So Harriet, this is

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

your lead.

CHAIR BEHAR: Okay.

So I want to thank the public for the detailed and very thoughtful comments. It is really is very useful how you kind of tear apart all of our thoughts and help us clarify exactly what we're looking at and what questions we need answered and solutions to those questions.

With those really good comments, we're hoping that the Crop Subcommittee will be able to move forward with a proposal in the spring.

And since I am a lame duck, Steve will be taking on this to the vote. So he'll become the lead in the spring. At least that's what he agreed to yesterday.

I would say that we are -- of course, we haven't had a full subcommittee meeting, but I think we're leaning towards having the annotation be for paper that's in contact with soil and then decomposes into that soil and still remain to have it not just only be for pots but for all those other production aids which basically have the same use

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

and effect.

Finding a practical percentage of the synthetic fibers and possibly limiting them to either a specific type of synthetic fiber or a percentage in the paper pot is also something we're looking at.

We're also looking at tying those -- the full pot or the full paper in the production aid to the biodegradability standards.

So we would have an issue with a polyester fiber and then the following year when you go in to rototill it, it gets that -- it gets all wound up in your rototiller.

So we do want the fibers to biodegrade.

Two areas of consideration that were brought up by the public that will be challenges would be to try to prohibit paper from genetically engineered trees since these are basically impossible to track and to the best of my knowledge, I don't know how you would figure that one out.

And then also the use of PLA polymers that are produced through genetic engineering

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

technology that might be a little bit more easily tracked through the manufacturers who would be adding it to the paper pots. And we still did get many certifiers in operations that said that these were important to them.

But I think that many of those that are using these pots, if they understood how much synthetic there was in there and why we're taking so long to deliberate on this issue, I think that they would be happy for that so -- because we really truly are looking out for the environment, for the soil, and for the long-term benefits that the paper pots offer to the growers without any sort of detriment to the environment.

So other discussion?

VICE CHAIR ELA: I would just add that we heard a number of public comments that we should just limit the annotation to being essentially a mimic of the newspaper.

You obviously heard my comments on that yesterday as I asked questions. But I think that opens it wide open to pretty much any synthetic,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

and I'm personally not comfortable with that and won't be recommending that.

And in talking with several manufacturers, they're not comfortable with that as well.

So at this point, from what I'm hearing, it looks like that 15 to 20 percent limit on non -- well, how do I want to say this, and it gets complicated because you all pointed out that cellulose itself is actually synthetic for the most part, the way it's made under our definition.

So I'm going to say fibers that aren't directly cellulose and have somehow been modified beyond cellulose are truly from a different source.

And I think there's a fair amount of support. You know, one person called it regenerative cellulose but it basically is cellulose-derived fibers that those -- and you'll find some way to make that useful.

The other thing I heard from comments is on the adhesives. You probably notice the subcommittee did not deal with adhesives because

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

that is a rather daunting task, to be honest.

But I did hear from several people that we may need to in the annotation somehow deal with the adhesive issue and limit it to certain adhesives just to keep that genie in the bottle.

So those are my additional comments.

Harriet, and then are there other Board members with comments?

Yeah -- oh, yeah. Dave, I'm sorry. I jumped over you. Sorry.

CHAIR BEHAR: Well, and just the biodegradability as well.

VICE CHAIR ELA: And the biodegradability, yes. Dave.

MR. MORTENSEN: Yeah, we also heard from quite a number of people that if doing all paper pot or all paper products was going to bog us down so that we couldn't get this done by the spring, that they were asking that we take a really critical look at whether we just stay on paper pots, and I think that personally really resonated with me.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

So I really am hopeful and confident that we can get this done by the springtime because the growers are going to be wanting a clear signal on what's coming for the next field season.

VICE CHAIR ELA: Harriet.

CHAIR BEHAR: Just to respond, I think that we're not going to look at paper ties and things that are not in direct contact with soil and degrading, but things like collars or seed tape, things that are actually touching the soil.

I think that those can all fit into this category because they're going to decompose into the soil, they're in contact with the soil, and so they're very similar to the paper pots, and it would save future boards from having to review, you know, put on the National List collars and seed tape, and all of those other items.

VICE CHAIR ELA: Dave.

MR. MORTENSEN: Just to respond to Harriet, and I guess as long as we can -- it can be done in a timely way. If it's going to be the adding these other things prolongs it for several

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

years or something, which I could envision it could, I think that would be unwise of us. We wouldn't be doing the farming community a service by doing that.

VICE CHAIR ELA: Emily.

MS. OAKLEY: Yeah, to that end, I think the issue of adhesives is an extremely tricky one, and I think that if we go down that road, we need to go down that road for paper as well to be consistent and it's the biggest gap in our newspaper supplemental TR.

So I understand the hesitancy with that, but we've got to look at cardboard, we've got to -- and so I don't want to do that. I think that -- I think we also heard from commenters that we don't want to get wrapped up, to use one person's term, in too much of a labyrinth because we're looking at the synthetics within a synthetic.

I don't want to create something that is less strict than the current listing, but I don't want to create something that is more strict than the current listing.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

VICE CHAIR ELA: I would add that, you know, I agree with you or I have agreed with you.

I'm wavering a little bit. I mean, part of the public comments were we should not be tied to be, that we should decouple our analysis from the newspaper listing, and I take those comments to heart as well that just because we already have something on the list doesn't mean that we should follow that.

On the other hand, I am a believer in consistency. So I am going to kind of leave that open in my own head.

Emily?

MS. OAKLEY: And I hear that, and I completely agree with that, but I also think as a Board, as has been discussed by commenters and Board members, we also have to triage our time and priorities, and if we spend an inordinate amount of time on this material, it seems rather odd to me just given the other broader context of our agenda and priorities.

VICE CHAIR ELA: Agreed. I would also

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

say in response to Dave, really if you look at our discussion, it is not about seed tapes and these other things. It really is trying to flesh out what a paper pot annotation is.

And so I actually personally don't feel like these other, as you know, paper as a planting aid, if we want -- not production aid, but as a planting aid, I don't think takes up more time at this point. It's really trying to define a paper pot, so.

Other discussions?

I would put -- like to thank the commenters that made -- gave input to us. I think this is one of the values of these discussion documents. This is where the Board may or may not have expertise and all of your inputs, this is really where we are looking for you to give us guidance so that we can make informed decisions and informed annotations.

This is where I really appreciate this public process.

Harriet, with that, I think Crops is

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

done, and I think you had one thing to add before we take a break.

CHAIR BEHAR: I think the Program would like to -- Jenny, you have something to say?

DR. TUCKER: Yeah, I just wanted to make a brief comment on this because of the last few days I've gotten emails from producers sort of asking what the status of this material is because they saw the agenda and are just keeping a very close eye on this.

I did want to remind folks that last fall this Board was very, very strong in passing a unanimous resolution at the fall 2018 public meeting recommending that we allow the continued use of paper pots while it is deliberating.

And so we did send a note based on that resolution. And the fact that half of the certifiers had already approved this in good faith, and it was a good faith decision.

And so based on that, we had extended the allowed use of paper pots until further notice.

And so the use of paper pots continues through

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

these Board deliberation. Please keep that in mind as you are deliberating on a topic -- on this topic.

This is a material that has been in use, has been approved in good faith by certifiers. And while we did make the decision that that determination by certifiers was incorrect, and we stand by that, it was a good faith decision and use of the material does continue in this interim.

I just want to remind the Board how strongly you urged me last fall to allow this. And so that's all I want to say.

VICE CHAIR ELA: And I want to add in today, I appreciate that, Jenny, and I think -- I know this is taking longer than we thought it would, but I think the Board is moving ahead and at a pace that is as expedient as possible while doing our due diligence. And I think the Program giving us the leeway to do that so that we can do this correctly while not tying growers' hands, I think is a great compromise.

So thank you.

CHAIR BEHAR: And also to -- we're

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

trying to make sure that however we approve it or in the annotation that it is a practical annotation and one where there are commercially available materials that meet that annotation, whatever it comes up with.

So that's part of the tricky part as well.

And it is 10:38, so we're eight minutes over. But let's take a break and come back at five to 11:00.

(OFF-MIC COMMENTS.)

VICE CHAIR ELA: Five to 11:00.

(Whereupon, the above-entitled matter went off the record at 10:39 a.m. and resumed at 10:57 a.m.)

CHAIR BEHAR: Okay. We will start with a little comment from Jennifer Tucker.

DR. TUCKER: I just wanted to acknowledge and welcome Devon who is joined next to me to sort of support Program up here and just to highlight how -- what a wonderful asset Devon is to the Program. He's done a lot of great work

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

this year. And so let's welcome him to the table here.

(APPLAUSE)

CHAIR BEHAR: And Devon is kind of doing double duty filling in until we get a new National List manager.

(OFF-MIC COMMENTS.)

CHAIR BEHAR: Okay. So we are next to the materials subcommittee with Emily Oakley as the chair. So I'll turn over the meeting to her.

MS. OAKLEY: Thank you, Harriet.

So the Material Subcommittee has three proposals, one discussion document, and one verbal update.

And our first proposal is Harriet's, which is the excluded methods determination October 2019. But before I turn it over to Harriet, I did just want to read one quick statement which is that genetic engineering has always been prohibited by the organic regulations.

Prohibiting genetic engineering in organic is a foundational tenant key to farmer and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

consumer support of the label.

And I just want to note that the ongoing work on excluded methods determinations is a complement to that.

So thank you, Harriet. I will turn it over to you.

CHAIR BEHAR: I just would like to thank Zea Sonnabend who continues to be someone I can pass -- I mean, bounce ideas off of as I am considering the issues. And there's also a kind of group of task force people that I bounce things off of, and I will be passing that on to whomever takes that on.

And I hope to be added to that list of someone to help.

So this excluded methods determination is the October 2019 edition. We continue to build upon the 2016 original document which spelled out in more detail kind of expanded upon the excluded methods definition, didn't add to it, but helped delve a little bit more deeper into what the various technologies that are mentioned and then gave some

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

more subsets to those technologies.

So as we go through this document, we continually illustrate to the public the items that we have voted upon in the previous documents, which include methods that are excluded and those that we are considering non-excluded.

And as I said in my opening remarks, the fact that we are finding items from our to-be-determined list to not meet the definition of excluded methods, we continue to provide consistency in certification and clarity for certifiers and operators and manufacturers to know what items we will allow and what items we do not.

But we really feel that everything that we're reviewing right now is covered under the current regulation.

So -- and I believe this will continue to be the format that we will keep adding to the list. And as we have our proposals, keep printing the current list so that the current recommendation will have the full list each time, again, just for ease.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

If you see, there are still items to be determined. And so I will happily pass them on to the next person because I kept working on taking the lowest hanging fruit I could.

So there -- but there are an important issues, actually still to be determined. We have six items now, although driving to the airport I heard of another method that is somewhat similar to CRISPR but supposed to be somewhat more targeted.

I think it's called CRIM. I don't know.

Anyway, I'm sure there'll be -- this list of to-be-determined is also not comprehensive and could be added to as proposals and discussion documents come forward.

But for this time, we brought forward two items: induced mutagenesis through in vitro -- let me just get the wording right -- through developed via use of in vitro nucleic acid techniques. So that is the infiltration of the nucleus of the cell and direct manipulation of the genetic material in that to produce a mutagenesis.

We received universal agreement that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

this should be an excluded method because of that direct manipulation of the nucleic acid.

And I want to point out to whoever takes this on next -- kind of looking at Dave, but I don't know if he's agreed yet -- that ASTA had some good information on some of the to-be-determined items.

So it might give you some -- a place to start to keep pecking away at this to-be-determined list.

I did not really -- I didn't see any comments that said that this should not be added to the excluded methods list for induced mutagenesis.

There are, however, numerous other methods to induce mutagenesis, which include irradiation, environmental stresses like heat or cold and chemical exposure. Those are still to be determined.

And I think that's it for -- I'm going to do one at a time and then -- so we can talk about that and then I'll go to embryo transfer and we can talk about that and then we'll do the vote.

So any discussion on induced

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

mutagenesis?

MS. OAKLEY: Is there any discussion on induced mutagenesis?

All right. Harriet?

CHAIR BEHAR: Okay. Embryo transfer, I'm going to read that.

Embryo transfer, embryo rescue in animals, use of hormones not allowed in recipient animals.

So this was pretty split through public comment and actually split by the author because many people -- and I don't know if it was 50 percent, but there was significant public comment that the hormones should not be allowed in the donor animals as well.

Most of those comments came from public interest groups, consumer groups. And then those who supported this wording were mostly certifiers who live by the word of the rule.

And the rule is that we start looking at organic animals at last third of gestation within their mother. And so the donor animal, however

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

it has been treated, should not be considered in whether or not they had received hormones.

However, the donor animal, by receiving those superovulation hormones, those eggs have been effected by the treatment of those hormones, and there can be subsequent generational effects on those embryos that had been born from those eggs that had come into being through superovulation and hormone use.

But in Committee discussion, we agreed with the certifier side that we're not really looking at that, and as far as an excluded method, it doesn't -- the use of hormones is not really in our definitions for considering that as far as genetic engineering.

So that's where we ended up. But I would like to go on the public record that over time, if we see, especially if it becomes more widely used either on the conventional side, the non-organic side, or the organic side, and we do see some negative effects in the offspring, that we might revisit this in the future.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

But right now, I think we're -- the proposal is to only look at the recipient animals and not the donor animals but with the knowledge that maybe, if we feel we need to, it could be revisited in the future.

MS. OAKLEY: Is there any discussion on embryo -- oh, sorry. Go ahead, Harriet.

CHAIR BEHAR: There was one other comment about cloning, and we do mention that cloning is not allowed. And so there -- I will make that in the cover sheet clear as well that both semen from cloned animals and eggs from cloned female animals would not be allowed in organic.

And there actually is semen available on the market now from cloned animals, although I think beef -- bulls. So that is something that certifiers should be aware of and be looking at.

MS. OAKLEY: So -- oh, yes. Dave?

MR. MORTENSEN: Yeah, I was just -- the table that has cloned animals and offspring excluded method, would -- I guess I would have assumed, but maybe that's not a fair assumption

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

that cloned eggs from a cloned animal would be included in that statement. Or no? I -- so I guess I'm just raising the question does that needed to be added just deliberately, or maybe we need to be more elaborate in what that covers in that statement that's in the document.

MS. OAKLEY: Harriet?

CHAIR BEHAR: Well, yes, and it does say that --

MR. MORTENSEN: Yes.

CHAIR BEHAR: -- in numerous places, actually, in the proposal. But because it -- if someone's just looking to see if embryo transfer is okay and they don't look at the rest of the chart, again, I just want to make it clear in the proposal if someone looked back --

MR. MORTENSEN: Okay.

CHAIR BEHAR: -- you know, that that was clearly -- and just to put it out there into the certification community that when there is artificial insemination of beef animals, that semen should be checked over for cloning.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. OAKLEY: Further discussion on embryo transfer in animals or any other portion of the document?

All right. Seeing none --

CHAIR BEHAR: Well, it --

MS. OAKLEY: Yes, Harriet?

CHAIR BEHAR: -- feels good to do a proposal and everybody thinks it's wonderful.

MR. MORTENSEN: I have a --

MS. OAKLEY: Yes, Dave.

MR. MORTENSEN: -- maybe just a process question, if I could since I may wind up inheriting some aspect of leadership on this but also I'm -- just as a clarification.

And that is several comments were made during the course of the public comment period that I believe were suggesting that a proposal like this one be written into guidance and that that -- and I heard words like it should be in guidance, it should be codified in some other form.

And so my question is, this process seems to me to be a living, morphing with time

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

process that we're following. And yet I was hearing, if I understand, a distinction that our stakeholders, some of them were asking and it makes sense to me that they would ask this, that we put this into a firmer state that a morphing document that we update on occasion.

And so I just ask other Board members to help me understand more clearly exactly what it is our intent is with this process.

MS. OAKLEY: Harriet.

CHAIR BEHAR: So the 2016 document which is the basis --

MR. MORTENSEN: Yep.

CHAIR BEHAR: -- as we're moving ahead, that's what we really want to have the NOP have part of not just on the NOSB recommendation side on their website but on the National Organic Program side, so if people come and look and want to understand what we're looking at.

And there, there could be some statement that says this chart will continue to be updated and then they go through their process

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

of that updating.

But that original document with the definitions and the terminology and those things that we've worked so hard to clearly spell out so we can move forward because we do get a lot of questions from the greater community --

MR. MORTENSEN: Yeah, yeah.

CHAIR BEHAR: -- is this allowed or not, and as we know, there was a, you know, confusion by some statements by, not the Program, but those higher up in the administration about talking about certain types of gene editing and that sort of thing.

And so this is the proof of our robust dialogue, and this is where we, the National Organic Program, and the greater community, because we rely very heavily on public comment, have shown that this is where we're going.

And so I think, you know, people want to know is embryo transfer allowed, right?

MR. MORTENSEN: Yeah, yeah.

CHAIR BEHAR: Where are they going to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

go to find that out?

MR. MORTENSEN: Yeah, yeah.

CHAIR BEHAR: So that's what we're trying to have. And over time, we know it's not going to all be done the minute that we make a recommendation.

MR. MORTENSEN: Yeah.

CHAIR BEHAR: But especially the 2016 document as our foundation is, to me and I think many in the audience, is important to get on the Program side and not just on the recommendation side.

MR. MORTENSEN: So as we move forward, then, I think that it's my view that it would be helpful for us to more clearly articulate our mileposts, right?

So one milepost might be occasionally we revisit it, a new method comes out, it's discussed, debated, and then added or not to this kind of document.

Another milepost is that what we were hearing from folks and in reviewing some more of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

the comments last night -- I was reading several of them -- folks are asking for something beyond that, right, something that is more definitive and more lasting that perhaps is revisited and updated, but otherwise, that's our foundational body of evidence that these are the things that we don't allow.

And so maybe as we go along together, if we could more clearly articulate what some of those mileposts are beyond the process that we're looking at right here.

MS. OAKLEY: Thank you, Dave, and I think that's a good point for us to discuss in the subcommittee --

MR. MORTENSEN: Yeah.

MS. OAKLEY: -- as we bring this up. But you're right to raise those comments and concerns, and thank you.

Harriet, do you have any additional comments in closing?

CHAIR BEHAR: Looking back at my notes from the public comment, no, I think I covered them

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

all.

MS. OAKLEY: Okay.

Any further discussion before we move to a vote?

All right. I think we're ready to move to a vote.

The motion to accept the proposal and excluded methods determination October 2019.

Harriet?

CHAIR BEHAR: Okay. So the proposal is the NOSB recommends the NOP add the following to the table of excluded methods in the National Organic Program Excluded Methods Guidance: induced mutagenesis developed use of in vitro nucleic acid techniques.

The NOSB recommends the NOP add the following to the table of not excluded methods in the NOP Excluded Methods Guidance: embryo transfer or embryo rescue in animals, use of hormones not allowed in recipient animals.

And the motion was made by myself and seconded by Dan.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

And the voting will start with Rick.

MR. GREENWOOD: Yes.

MS. SWAFFAR: Yes.

MR. CHAPMAN: Yes.

MS. de LIMA: Yes.

DR. SEITZ: Yes.

MR. MORTENSEN: Yes.

DR. BRADMAN: Yes.

VICE CHAIR ELA: Yes.

MR. RICE: Yes.

MS. OAKLEY: Yes.

MR. BUIE: Yes.

MS. BAIRD: Yes.

CHAIR BEHAR: Chair votes yes.

MR. RICE: That's 13 yes, 1 absent, the motion passes.

MS. OAKLEY: Thank you.

Our next proposal is genetic integrity transparency, a seed grown on organic land instruction to certifiers. And again, this is Harriet's proposal.

CHAIR BEHAR: I always take the fun

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

issues.

Okay. So there were a lot of comments on this one, and they were not all in agreement.

I just want to make it clear because there were numerous comments that said there should be no tolerance levels for genetic contamination in organic seed or organic crops.

And that is not what this recommendation states. It clearly states this is not a tolerance level.

It does mention that tolerance levels are present in the marketplace and that producers, through no fault of their own, lose markets because of unintended presence of genetic contamination.

And the point of this document was to give producers a way to know what the levels of contamination are in the seed that they plant so they would have a baseline of what -- of actually the minimum that they could have because they could get more contamination out in their fields.

But if they're in a fairly isolated area, and let's say they're going for market with

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

a 0.1 percent and an IC (phonetic) that's at 0.3 percent, they're never going to make that market.

And there's a lot of contracts out there that actually stipulate that if you can't deliver on the contract, you've got to buy it and deliver.

So this is -- this can be a significant burden to producers if they can't meet that.

On the other end, those that are buying the crop, they're planning, you know, just in time kind of thing. They're bringing in their corn or soy bean or cotton, and they're testing it there and they're planning to clean it and package it and ship it out, you know, in a day or two.

And if all of a sudden they lose a significant portion of the load they're about to clean because it goes over their tolerance level, then they're scrambling to try to find the right level or tolerance in a product.

So the genetic contamination causes some havoc in the supply chain, and so this was to try to at least give some tools to farmers so they could and could choose seed that would give

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

them the best chance of meeting their market needs.

It's clear from program guidance that if there's the presence of genetic contamination, and it was there that was unintended, it was not an intentional use of genetically modified germ plasm or whatever, that the operation does not lose their organic certification and neither does that crop.

So finding genetic contamination presence does not take away organic certification.

The farmer or the handler may lose their market who is testing, but that could be still sold to an organic stream who either doesn't test, doesn't care about the genetic contamination, or has a higher tolerance level that they're approving.

Okay. So there was a lot of comment, which I thought was excellent, about wanting training from the National Organic Program on GMO testing types and understanding the accuracy of those results.

Numerous people asked for a National

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Organic Program task force to help with that development to give certifiers and operators and seed suppliers more guidance on what they would be using so there'd be more uniformity in the testing and more trust in the results.

Okay. There was a question about whether this requires that farmers check with their seed suppliers, and it doesn't say that, and that was the intention.

This was just for the certifiers to make that known. And I know that some certifiers do, and I know that some farmers know, but as an organic inspector, I would say that many farmers don't realize the -- all the testing that's going on and that they assume, especially if they're buying organic seed, that it's free of all genetic contamination.

And from what we saw with the seed supplier survey, and thank you, Kiki, for providing that to us. I know that was a lot of work, if she's still in the audience. Oh, there she is.

That there is genetic contamination and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

that the seed suppliers actually take a significant economic hit by having to either divert seed to a non-organic market if it's over the tolerance that they are seeking or even sometimes destroy it because there is no market for that certain variety.

So genetic contamination is a very large problem in the organic world because we are small and they are big.

But we are a growing market. The non-GMO market is a growing market. And so I think over time there's going to be more and more -- well, there already is quite a bit of this testing.

The other item that almost universally everyone asked for and even cut and pasted back into their comments was the call for the task force to help us understand what is the larger problem out there with genetic contamination of seed. And that's all we asked for in the task force was seed.

And if we can get that, maybe in the future we can look even at the crops. But first we need to know about the seed because the seed

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

producers spend a significant amount of time and money developing germ plasm, bringing in foundation seeds for making their hybrids that contain characteristics that work on organic farms.

And so when we lose, some of those varieties that have been bred specifically to work with slower release fertilizers like manures, something like with corn or soybeans that they jump out of the ground quickly because organic farmers plant later and they canopy early because that's part of the weed control strategy on an organic farm, all those things, when we lose those due to genetic contamination, it's frustrating for the seed growers, the farmers lose those options.

And so we really -- I'm looking at Jenny -- ask the National Organic Program to help us with a task force to understand the problems that we have so we can try to find solutions because there could be certain regions in a country where we have cleaner seeds than others.

And the seed breeders are coming up with some solutions that, again, seeing which ones are

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

most effective and having that out there in the greater community could be a benefit to all.

Okay. So the original proposals actually required that the farmers get the information from the seed producers and that all seed producers of corn, organic and not organic, provide information to the farmer on the genetic contamination in the seed.

We got a lot of negative comments on that. And so we backed off from that. However, the Organic Seed Alliance survey did show that there's significant testing already going on.

So we backed off on this and just said, you know, let's start out with the farmers, with the certifiers informing the farmers that this information is out there for them to seek out. And if they have a market or have any inclination, I mean, you'll find that most farmers don't want to have genetic contamination in their seed. There are characteristics that kind of travel with the genetic engineering, especially know in corn it's a higher lignin content.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

And if you want to graze the corn stalks and you have a high percentage of genetic engineering, it's not palatable for the cows.

So if you know you're getting a high GE content, you know you can't plan to let your cattle graze on those corn stalks.

And so that information is important, not just for sale but even for use on the farm.

With the negative response from the seed companies that they didn't want to be forced, I felt that the National Organic Standards Board would not vote to approve the proposal, and I wanted to have a proposal that would pass, although personally I think that it should be a stronger proposal. But I'm willing to move ahead with this as a first step.

We did get some certifiers and grower groups and I heard from an individual growers outside the public comment process who wanted it to be a stronger proposal, and I explained to them why we went to this level.

I really enjoyed what the Vermont

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

organic farmers said. They said, why are farmers and seed suppliers in opposition to each other when they all have the same goals which is more transparency and understanding of genetic contamination on seed plants and on organic land.

There was a very good suggestion for improvement that we change the part where we talk about that they inform people about genetic testing of seed or planting. This proposal moves it beyond just corn. It's anything that has a genetic engineered equivalent.

So the change was that instead of asking for is there genetic testing on the seed or planting stock, but instead asking what are the levels -- are you knowledgeable of the levels of genetic contamination in your product.

It's just kind of a nomenclature. It basically results in the same thing and I think I could put that in the cover sheet to clarify for the NOP somewhat better language to -- just to make it easier for everyone involved.

Many people did comment that they liked

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

it included more than just corn. I believe that was the Organic Produce Wholesaler alliance -- or coalition, or whatever they are, that they liked that because there is genetic engineering of produce, summer squash and some other items.

The Inspector's Association spoke in favor of it and consumer groups also spoke in favor of it.

So with that long introduction, I am ready to have a conversation.

MS. OAKLEY: Thank you, Harriet.

Is there a Board discussion on this topic?

Dave, then Asa.

DR. BRADMAN: Can I go first?

MR. MORTENSEN: Sure.

DR. BRADMAN: I just asked to go first just to say, Harriet, I really appreciate and probably on behalf of the Board really appreciate the leadership that you've taken with this. It's been an incredible amount of work and really appreciate it, and I've learned a lot.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

CHAIR BEHAR: Thanks.

(Applause.)

MR. MORTENSEN: Yeah. I echo Asa's sentiments. It wouldn't have been moving had it not been for Harriet's efforts.

Harriet, just to be sure that we're all clear, the language, which I think is perhaps -- makes it more palatable to a broader audience in my view, the language is advisory.

There's a lot of should and could, may, is subject to. In other words, what it is that is framed here is encouraging certifiers to work with our farmers to help them be better informed about this issue.

There isn't must and have to meet X, Y, Z threshold of X, et cetera, et cetera, deliberately because of all the public comment and the multiple iterations of the document that we've been working on over the last -- I don't know how long it's been now, year and a half or something.

Is that correct?

CHAIR BEHAR: Yes, that is correct.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. MORTENSEN: Thank you.

MS. OAKLEY: Ashley?

MS. SWAFFAR: Yeah, so thanks. I know this is a huge issue to tackle and it's very, very difficult.

You know, this proposal basically is just asking certifiers to just tell their folks that they can ask for it.

And I just want to say that I really hope the Program will listen on the task force because this is a really, really big issue. Nobody wants to talk about it.

I see it on the backend on the feed mill level when you have folks testing, you know, that will -- most mills will blend organic, non-GMO and organic corn -- feeds, not together, separately.

But I mean, when you hear their testing protocols for non-GMO project verified feed and then organic, it's pretty sad how much more strict they are than what we are. So I really hope that the Program will support a task force moving forward because this is a really big issue that we need

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

to get a handle on before it's too late.

MS. OAKLEY: Scott?

MR. RICE: I think just on the subject of the comments from the certifiers and the need for a task force, there was pretty broad comment from that community about needing greater guidance on GMO sampling so that we're all on the same page.

And ACA did develop best practices for that. That could be a good resource should NOP go down that route.

MS. OAKLEY: Okay. I'm going to call myself.

I agree with that, and I think the new learning database is another avenue for this and I wanted to just ask if I could ask the Program their thoughts on a task force given the great deal of public comment and support that we've heard for it.

DR. TUCKER: So I think we certainly hear the interest in this topic and will consider that when we get back.

Like all meetings, I will take back the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

key themes from this meeting to our leadership, and we'll consider next steps.

MS. OAKLEY: Harriet?

CHAIR BEHAR: I know that enforcement and fraud are at the top of the list for the Program, but in some ways this is both enforcement and fraud because the consumers are expecting to not have any genetic engineering in their food. The livestock producers don't want to get feed that has been genetically engineered for their animals.

And the enforcement goes back to, you know, the certifiers doing genetic testing as well and just down the chain, as Ashley said, that in many ways the organic world, because we're -- seem to be not genetically engineered, it may not always be the truth, and we really should have some tougher enforcement on that end.

DR. TUCKER: Can I add a brief comment?

This is -- seed in general is an area -- so not just this topic but more broadly, seed searches and all of that has been raised as a topic to the Program as we are exploring additional courses for

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

the organic integrity learning center, a seed is one of those on the list that we've sort of been evaluating, you know, who could develop that training.

And not just on this topic but broadly related to seed, I think there are a lot of questions about seed.

I would caution a little carefully on the word fraud. You know, fraud has a very specific connotation and I think we should be very careful when we use that term.

MS. OAKLEY: Ashley?

CHAIR BEHAR: I understand that, but if you asked a consumer, they would feel at least that the promise of organic was not being met if there was contamination of genetic engineering in their organic food.

MS. OAKLEY: Ashley?

MS. SWAFFAR: Yeah, I just want to say I don't think it's fraud by any means that somebody's like trying to do this on purpose. I think it's through pollination and things like

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

that. And I think why that task force could be important is maybe they could come up with some breeding techniques or, you know, things like that to maybe help prevent getting as much -- getting contamination in.

So I definitely don't think this is fraud at all. It's just the world that we live in that, I mean, we have neighbors.

MS. OAKLEY: I just wanted to add a comment regarding the farmer feedback that we've received and expressed desire for a more strict proposal.

And I just want to reiterate what you said that the subcommittee discussed this at length and ultimately we have to come forward with something that can get enough support to be voted on, and sometimes that compromise is greater than some people would like, but that's where we find ourselves to date with this proposal, and we would rather move forward than not move forward.

Is there -- yep, Sue.

MS. BAIRD: Yeah, I've got -- you know,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

I've been an organic inspector for a lot of years as well, and I reiterate that a lot of those technique are planting later in the season so that there's no -- you past the pollination stage, a lot of things that they do.

I think farmers are very diligent not to be fraudulent in their seeds. And I don't think seed companies are fraud. I think that that's a term that's not quite applicable here.

And I've -- but cross pollination happens, and accidents happen. One of the things I remember so vividly was the inspection of a farm that had been certified for 40 years or had been managed organically for 40 years and certified from the time they could before NOP and had always been managed organically, and it was a soybean/corn farm.

And a neighbor had hired, and he had all the buffers in place that he could. He had, you know, all those things that he had -- could do.

And his neighbor down the road hired

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

a sprayer to come in and of course he had to Roundup beans and the company hired someone who was not so diligent and probably like me, not so cognizant of directions and instead of turning north, he turned south into my farmer friend's farm.

And the field was sprayed with Roundup.

And Walt was totally surprising to him and to me was about every four-foot square there was beans left standing in the field, which meant that there had been contamination of the seed, certainly not his methods of production.

It's the real world, unfortunately. I tended a seminar in 2003 and at that time it was stated that -- I should not have ever said -- can't remember -- 95 percent, 2003 I think it was 95 percent of all seed was contaminated with GE.

So you buy organic seed and you're going to have GE. It's just there, and it's not fraud.

It's just there, so I think that the efforts that this committee is doing I commend you completely.

I also caution us, just kind of hold the words down.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. OAKLEY: Harriet.

CHAIR BEHAR: Okay. So I realize that fraud has a legal definition and this doesn't meet the legal definition, but there is also kind of a colloquial feeling about it. And more at the -- and some are good and some are bad.

When a non-organic seed supplier provides an affidavit that says my seed that I'm giving to you, it's not organic, to the best of my knowledge, we did not use genetic engineering techniques to produce that seed, but they know because they tested it, that it contains 5, 6, 7 percent genetic engineered germ plasm and they don't put that in the affidavit, that's what we're trying to get at here is so the farmer truly understands because when the farmer gets that affidavit that we did not intentionally put it in there, the assumption is it's not there. And that is not fair to the farmer.

So that's the transparency. It's not called preventing fraud. It's asking for transparency so the farmers have the tools they

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

need. And I would -- like I said, I would have liked it stronger, but I don't think that the seed industry is ready for that yet.

I'm hoping that the certifiers will be robust in forming and maybe even put it in the OSP, you know, on their seed, are you aware you can contact your seed supplier to find out contamination levels in your corn or soybeans so that farmers start calling.

And then they're going to get tired of answering calls, and they're just going to be transparent about it.

MS. OAKLEY: Any further discussion?

Dave?

MR. MORTENSEN: I guess I would also like to just add based on some of the comments we just made in the last six minutes.

Some of the comments that were made by some of the Board members in the last couple of minutes that this is not an indictment of the seed industry, and it isn't the case that 95 percent of the seed is contaminated.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

What we're trying to do is to have just openness about actually revealing that many of the seed companies are doing a great job and catching cases where things are problematic.

And I think it's -- and in my view, and I haven't -- I had some conversations with some folks that were discussing last night while we're out together that, you know, are concerned about certain aspects and advocating for the task force.

One of the things that I think is very comforting for farmers is to have control over the things they can control. And this clearly -- when farmers choose seed -- is one of their most important points of leverage for the coming field season.

And you know, the weather they don't know. They don't know a whole bunch of other things, but they do know that they're starting with what they're starting with. And I think that's what we're trying to get at here. It's the front end of the production system to allay any concerns that might arise later in the field season if a

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

problem should arise.

MS. OAKLEY: Any further discussion?

Harriet?

CHAIR BEHAR: So like I said, I hope this is a first step. I hope that the National Organic Program will work with the NOSB on the development of a targeted task force to help with understanding what the issues are with genetic contamination and seed.

And I -- you know, I appreciate really everyone's strong input on this -- and this started -- I don't know -- it's been maybe nine years as a seed purity discussion. But we understand as you said, Sue, we're not going for seed purity. We're just trying to give farmers the tools so they can meet their goals on their farm.

MS. OAKLEY: Any final discussion on this before we move to a vote?

All right. I think we're ready to move to a vote. Glasses.

The motion to accept the genetic integrity transparency of seed grown on organic

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

land instruction to certify a proposal. The motion was by Harriet, seconded by Dave.

Harriet?

CHAIR BEHAR: Voting starts with Ashley.

MS. SWAFFAR: Yes.

MR. CHAPMAN: Yes.

MS. de LIMA: Yes.

DR. SEITZ: Yes.

MR. MORTENSEN: Yes.

MR. MORTENSEN: Yes.

DR. BRADMAN: Yes.

VICE CHAIR ELA: Yes.

MR. RICE: Yes.

MS. OAKLEY: Yes.

MR. BUIE: Yes.

MS. BAIRD: Yes.

MR. GREENWOOD: Yes.

CHAIR BEHAR: Chair votes yes, and now I'll have a little bit of time to bake a pie now and then.

MR. RICE: The final vote is 13 yes,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 absent, the motion passes.

MS. OAKLEY: Our next proposal is the Material Subcommittee proposal 2019 research priorities, and the lead on this is Dave.

MR. MORTENSEN: So the research priorities, the process that I think we all know the process we've been going through, which is that updates for the research priorities are solicited from the subcommittee at the subcommittee level and then discussed across the subcommittee's -- with several things in mind trying to identify areas of research that might help address someone uncertainty that exists in our process, a product, a -- something to do with genetic engineering or whatever it might be but that the research could help inform our process but also that the research would help the organic farm and market chain continuum.

We've revisited and discussed this and updated. We're cognizant of the fact that we don't want to grow a list of research objectives that is only added to and never -- some things never

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

sunsetting from the list, so there's a fair amount of discussion about that.

In the current iteration, the 2019 iteration, we've added several new areas of research that we're lifting up needing some activity.

And by the way, we were happy to learn that these research objectives have been a source of helping guide the request for proposals for the OREI and the Transitions to Organic Program among a couple. But I'm -- there are others that have also been using this list to help inform members of the Board have also been trying to proactively share this list with applied and basic researchers so they're aware of the priorities.

One new priority is a focus on farm level or system level, and by system that could include marine impacts of rockweed harvest, for example. But ecosystem provisioning centered assessments of organic systems.

There was a fair amount of discussion and interest in seeing greater research in the area

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

of cover crops with a specific focus on the degree to which cover crops can meet the fertility needs of the subsequent crop in field systems. That's in there.

Identifying barriers, barriers and as well as developing protocols for the organic nursery stock industry where there's a -- we've heard from stakeholders a lot that there is a need there.

And the last area was the genetic modificate -- the genetic GE part of the research priorities of which there were four parts. We've added a new one, which is to assess the genetic integrity of crops at risk and there would be an example that greater insight into the genetic integrity of crops at risk could inform this very sort of process that Harriet just led us through.

So it would be feeding our understanding there.

We restructured the plant and the plant diseases section, collapsing some sections and trying to bring greater focus in that area in a

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

topic that had been in the research priorities that was sunsetted, which isn't to say that no one will ever do work on it again. It's just to say that it's not currently an active priority.

List the area of contaminated leaf and grass clippings and other carbon stocks that might be contaminated and the fate of those contaminants in the composting. And the reason for that was that the feeling was that quite a body of research had developed during the past number of years.

We got quite a bit of public comment -- excuse me, public comment about, you know, some supporting these. There was some helpful comments provided recently that are now added to a working document that we will be revisiting for refreshing the priorities as we go forward but wouldn't be included here.

For example in the NOC comments there was -- they were urging us to be more specific about some of the no-till organic initiatives or areas that required more research. And a number of our Board members responded very positively to the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

social question that addresses barriers to participation in organic farming by folks of color.

And I guess having listened to that very thoughtful presentation by a woman whose name I don't know or can't remember, I found that very interesting.

I also would say that having been at a conference recently where there were folks of color presenting on the challenge to access to organic food on the backend, so the specific comment was about certification.

I also was left -- left that conference thinking about the social implications of access to food on the backend that could be some sort of topic area that's broader than just the certifiers themselves and farmers.

So anyway, that's it, and I think we had good input, good discussion around the subjects and the document is in our looseleaf binder.

MS. OAKLEY: Harriet?

CHAIR BEHAR: The public may notice that it's a longer list than in the past. At one

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

point, we were looking at, you know, we shouldn't have more than three to four per -- and maybe Board members, too, notice that.

But we know that -- thank you out there in the audience who lobby Congress to get more money for more organic research.

So we felt that we could add a few more items to our list because there's more money in the pot to go around.

MS. OAKLEY: Asa?

DR. BRADMAN: I just want to comment.

I appreciate input on the handling priorities. We have seen that there's been some funding for looking at organic celery production for celery powder.

BPA right now is not on our work agenda, but I continuously get questions about this from different stakeholders and just recently had contact with the breast cancer group in San Francisco and they're very interested in work on this issue and the NOSB working on this issue.

And again, I think that that research

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

priority defined alternatives to BPA particularly in can linings and other package-related issues, there's something that is still percolating and could use some attention.

MS. OAKLEY: I'll also note that we got a lot of comments this time around in terms of the actual wording of these different research priorities and suggestions for edits, which is a somewhat new piece of stakeholder feedback which we really appreciate.

And one thing we've discussed in my -- and we'll discuss further in subcommittee is the notion of incorporating some of those changes, bringing the document back in the spring to give stakeholders additional time to make feedback or add suggestions for research priorities that should be included in that calendar year so that there's a little bit less lag time between those suggestions and when we incorporate them.

So we would still then go through the regular process that we go through, by subcommittee to determine new priorities but it would also give

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

additional chances for feedback.

Any other comments?

Discussion before we move to a vote?

Okay. The motion is to adopt the proposal in 2019 NOSB research priorities, motion by DAVE and seconded by Lisa.

Harriet?

CHAIR BEHAR: Tom will start with the voting.

MR. CHAPMAN: Yes.

MS. de LIMA: Yes.

DR. SEITZ: Yes.

MR. MORTENSEN: Yes.

DR. BRADMAN: Yes.

VICE CHAIR ELA: Yes.

MR. RICE: Yes.

MS. OAKLEY: Yes.

MR. BUIE: Yes.

MS. BAIRD: Yes.

MR. GREENWOOD: Yes.

MS. SWAFFAR: Yes.

CHAIR BEHAR: Chair votes yes.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. RICE: 13 yes, 1 absent, the motion passes.

MS. OAKLEY: Thank you.

The next item on our agenda is the discussion document, marine materials and organic crop production.

So before I start in on this, I did want to just say that I'd like to give, again, just sort of a brief introduction to this, and then spend the time, if we can, with Board discussion on this discussion document and potential next steps.

So before I begin, I just want to thank the NOP heartily for the marine materials panel that we had this meeting. I think it was extremely helpful and substantive and illustrated the benefit that panels can have for helping to inform us of complicated issues. So thank you for that.

I also want to thank, of course, the panel members for the time that they put into that.

And I really look forward to delving further into the slides that we didn't get to finish in terms of recommendations that the two scientists on the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

panel gave us, and thank them for their collaborative work on that.

I also want to thank the trade associations for creating a task force on this issue and working together to give us stakeholder feedback from industry because we have discussed in the past that that's not been adequate. And that really helped us get additional feedback this time around.

I also want to the OMRI for publishing in their newsletter that we're working on this issue and for asking for their members, and especially those with OMRI listed products in these categories to be aware that we're working on this topic and that the stakeholder community and industry in particular can comment. So thank you to everyone for helping reach out to the broader community on this.

So basically what I want to say is that our job as NOSB members I think is to take very disparate points of view and sometimes data and look at both of the ends of the spectrum and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

everywhere in between and try to come up with the middle ground and the compromise that is most viable and try to get as many stakeholders and Board members in agreement with those compromises as possible.

If we look at sort of one spectrum or one stakeholder group in particular and not the others, we obviously can't go forward with proposals.

But this topic has had a great deal of time and feedback and I think, and I hope, that we would be ready to come forward in the spring with a proposal that I am very optimistic will gain enough support from the stakeholder community to move forward.

So what I wanted to just outline is my kind of broad thinking on what that might look like so that people have advance knowledge of that and always know that the docket is open after these meetings, so please give us your feedback between meetings and before meetings. If you have it, it's greatly appreciated.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

So I think where I am heading with this is looking at the possibility of organic certification or annotation, whichever one seems to be the most appropriate tool.

The proposal would then also require the establishment of an NOP task force to develop guidelines for these various species and geographic regions and harvesting methods based both on the panel's recommendations and the experts that would be -- or rather the panel we had today but also the experts that would be on that task force.

The possibility that we've discussed is the option looking at maybe those several species that are most highly used and starting with them, sort of a triage rather than trying to address the wide number of species that are used.

That would then lead to guidelines or instructions to certifiers across probably all certified uses of seaweed.

That would also then need to be coupled with certifier training. But most importantly, I think any requirement for organic certification

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

or annotation would need to be put on pause or would be contingent upon the development of this task force and development of guidelines and would require an ample phase-in period.

I know we've heard numbers from 12 months to 10 years. I think if we could look at something like a five-year phase-in period, that is a very long period of time, and it obviously will also take a long time for the NOP to work on this issue.

So I don't want anyone to think we're coming out in the spring with something that would adopt organic certification and then in the fall people would start worrying that they need to start looking at this. This is a long-term process.

So that is what I wanted to present, and I'm really eager to hear from the rest of the Board as to their thoughts on both the panel and this topic in general and where we head next.

Sue?

MS. BAIRD: I really appreciate the subcommittee work on this. It's brought to my mind

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

the fragility of our system. And I had not ever thought about it before. I mean, we just feed sea kelp to our animals, right?

So I really do appreciate this and for you to tackling it. I appreciated especially the task force and the information that I gleaned from that.

And I appreciate being invited to the lunch afterwards so we had further discussion.

I really, really -- I just really appreciate it. But what I would say is if we are going to have consistency, I would be leaning towards going towards certification as well. That's just the way we're ever going to be able to be consistent is that everyone operates by the same rules and regulations.

I support having a task force to develop what those rules and regulations that we're going to be certifying to.

So I think you -- I support the direction you're taking, Emily, and thank you.

MS. OAKLEY: Dave?

MR. MORTENSEN: Yeah. I benefitted a great deal from the panel, so thank you, Emily, for your leadership in assembling a really -- a panel that really spoke to the questions that we were seeking answers to.

I second the notion of the triage approach. I was really struck by the comment -- I think it was Allison or Allison and Nichol playing off of each other when asked about how would you deal with this complicated problem in a way that it's not left intractable.

And they said that there were -- I think I heard five to seven, you know, big player algal species.

I was also struck -- it was a complete new way of thinking about it to me that these -- many of these algae occur, these really common ones occur in a near monoculture in contrast as they were making the analogy of a canopy of algae to a canopy of a forest.

And, you know, a canopy of a forest is not a monoculture. It's many, many, many species.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

So the notion of harvesting one tree out of -- species out of 20, it seems intractable in the same way that it seems intractable to me that you can manage how you're going to harvest rockweed if there's 20 other things that you're getting at the same time.

So I like the triage approach. It seemed a lot more doable to me after listening to the panel and that was very helpful to hear.

And I also think that the approach that we've taken with your leadership on this to engage the folks that are doing the harvesting, the folks that are -- you know, so that we've got -- we have a pretty good sense for where the weaknesses and the, you know, sort of challenges in this whole process lie. So I'm excited to see us come this far and move forward.

MS. OAKLEY: Rick?

MR. GREENWOOD: You know, I really appreciate getting the background information. And I agree, a slow approach is really necessary.

I mean, it's a very fragile ecosystem and most

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

of us are terrestrial based.

And every time I hear something, I know I know less than I did before. So it really I think is very important before we make any decisions to really understand what we're doing because I'd hate to come up with regulations that are meaningless and have no basis and facts.

So I also agree. I think slow is better. I hate to say it ever on some things, but I think it's really true in this case.

And it reminds me a little bit of paper, how little we knew about paper until we started on this. Again, I like the approach.

MS. OAKLEY: Steve?

VICE CHAIR ELA: I think Rick just nailed it. As a terrestrial person, marine ecosystem's not growing up on the shore. I'm fascinated by all the people that testified -- excuse me -- that have grown up on the shore and know these systems much better than I do.

I also am very flummoxed by how we even approach this at all. You know, inaction is an

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

action. On the other hand, I -- you know, bad action is not useful either.

And so I kind of get caught in that bind.

I, you know, have heard that certification may not be the right idea. I've heard that wild harvest may not be the right idea. I've heard that no regulation may not be the right idea.

And so I'm not really sure how to proceed, honestly. But yet I think it's an important thing.

And I think what I really come up against is I hear, you know, on the Atlantic Coast with Nova Scotia and Maine that I think there are probably very sustainable systems there. You know, I really worry in other parts of the world that they're not. And I don't hear from those people and obviously international people aren't going to come testify to us.

But I don't want to say, oh, we don't need to do anything because the industry is doing it when we know there probably are areas where that's not true in species that's not true.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

On the other hand, I want to honor what is being done and let people that are doing good work do their good work without us interfering in that.

So that's where I really get bogged is how do we deal as a group that does have international people that's certified through the equivalency of U.S. standards, how do we protect those international marine areas while honoring what's already been done in our domestic lens.

MS. OAKLEY: So I'm going to just quickly comment on that. And I think those are all good points. I think it's important to realize that the three harvesters that we -- well, we heard from several others, but the -- that gave oral testimony either on the webinar or here all have certified organic production of the same species, but they also sell for crop fertility inputs and organic certification comprises half or the majority of their production systems.

So I think, you know, we came to organic certification largely because it almost seemed like

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

a logical place to flow given that.

I know that there has been comment, you know, certainly by some harvesters and industry as well that this is predicated on the assumption that there is an environmental harm, and I know we've discussed that already a little bit.

And I don't -- I want to just clearly state that I don't think that we came to this based on bias but based on our previous discussion over the review of these sunset materials based on our TR, based on public comment, and based on the precautionary principle that I think is our obligation to take given our responsibility to ensure that we are minimizing environmental harm.

I don't think we are making assumptions one way or the other but we are trying to make sure that we are doing our due diligence.

And Harriet, did you have your hand up?

Okay. Harriet.

CHAIR BEHAR: So I'm greatly gratified that we are considering environmental impacts as one of the people sitting in an environmental seat,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

and that -- because many times we focus so much on the material and that.

But the definition of organic in our rule talks about the production system that responds to site-specific conditions by integrated cultural, biological, and mechanical practices that foster the cycling of resources, promote ecological balance, and conserve biodiversity.

And so I think this is really important that we -- I know this is tough. I know this, you know, can give a lot of people heartburn. But we have to remember what our core is and that's our core is that that ecological balance and conservation of biodiversity.

And so that's where I hope we can go with this.

And then the other side of it is, again, I always, you know, think about the black eye, you know, that we're out there destroying the marine environment so we can grow whatever, organically.

Of course, it's not only organic producers that use kelp and seaweed, so it wouldn't

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

only be us.

But we in the organic world should be more environmentally sensitive and be willing to go the extra mile.

MS. OAKLEY: Asa, Sue, and then Scott I think.

DR. BRADMAN: So in some ways I'm a little different, maybe strange from some perspectives. I do a lot of ocean swimming in California, not just on beaches but often in coves and places that's sometimes are a little scary maybe.

I just want to read this quote here that was from an article just yesterday in the local paper in California.

Envision California's lush forest from San Francisco to the Oregon border. Now imagine that 90 percent of those forests disappear within two years. Laura Rogers-Bennett with the California Department of Fish and Wildlife says that's exactly what happened to underwater kelp forests off the northern California coastline from

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

just 2014 to 2016.

And you know, I kind of grew up with kelp and I've done a lot of swimming in kelp beds.

I always felt safe there because I worry less about sharks.

The -- there's been an explosion of this purple urchin maybe related to warmer temperatures, disease to starfish and predation on other species that has allowed this species to proliferate.

So we're seeing in a very short time almost possibly a real ecosystem collapse. And that that may spread as well. And this, of course, is a -- you know, a marine algae plant that we're concerned about.

So just to underscore that as we think about this, we're talking about using a wild resource and transferring those nutrients to our agricultural setting to land or other uses that are organic but we're still exploiting that resource.

And I think that is a tremendous responsibility and to the extent that organic can

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

protect that environment and wild resource, I think that's important and just underscores how important these issues are and that we live in a dynamic and changing world.

MS. OAKLEY: Sue and then Scott.

MS. BAIRD: Yeah. I tell -- when it each organic agriculture, I tell everybody that when I first found organic, because I came from a conventional agriculture world.

When I first found it, it reminded me of what my Cherokee grandmother always said, which is that we are a part of earth and they are a part of us. And so I appreciate Harriet reading that definition because that's what turned me on to organic was the fact that we are honoring the fact that we are part of Mother Earth.

It is scary how quickly we are decimating Mother Earth and the fact that Asa said within two years we've lost a lot of our biodiversity on the coastlines scares me.

I am a terrestrial. I'm interested -- I was not ever on an ocean until I was in my 50s,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

so that shows how little my background is on this thing.

I think we've got -- so now I've got to back up. We've got to hurry up wait. We've got to wait hurry up. I mean, how do you say that?

We don't have a lot of time to develop those regulations and those things. If we're going to be losing our ecosystems within two years, we need to move on this quickly, so I'm backtracking what I said earlier.

Thank you.

MS. OAKLEY: Well, just as a point of clarification, that loss is not attributed to harvesting of seaweed for these purposes. It's -- but I agree with you. I think that we do have to realize that there are broader environmental issues that concern us, especially acidification of the oceans, rising temperatures, that are impacting those ecosystems.

And then when we come in and additionally impact them, that is something for us to seriously consider.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Scott, right? And then Harriet.

MR. RICE: Thanks.

I think this is an incredibly important topic, too, and a lot to bite off. It's -- from looking at the comments from a lot of the certifier perspective and just thinking about it myself, it's a lot to work through of how from a practical standpoint the certification would -- could happen.

I looked at some of those maps of how spread out and how extensive those sites are and thinking of how you'd even start to schedule that inspection or manage it and meet some of the expectations of what our regulations currently have as an annual -- inspection.

I also have some concern about just the capacity of -- for expertise to administer this.

It's, you know, diving into a whole other area.

It's not the first time we've done that with different production systems, but I think this has a lot of very specific and unique characteristics that, as we saw from our panelists, you can spend a lifetime studying but -- so I think we need to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

be extremely -- both extremely specific on what those regulations and what that guidance would look like, but we also need to recognize that we're an international standard and that we're sourcing from around the world and that we may have a ton of information about Nova Scotia and the coast of Maine.

We don't have a lot of information or at least at the moment about where else this is going to impact. So just some thoughts about the kind of administrative capacity on that, lots to think about but an important thing to move forward.

I think I agree with the sentiments of moving, you know, as we can to be effective but making sure that at the end of the day it is effective, it is attainable, and it's -- it meets what we're -- what our goals are.

MS. OAKLEY: Harriet, before you go, could I just quickly comment on that?

I mean, I think you're absolutely right. And you know, within the debate on certification, there are those who would say, well,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

you can't certify it because it shouldn't be certified because it, you know, shouldn't be harvested.

And then there are those who would say, you know, if you allow it, you could be green washing the resource, so to speak, because there might not be adequate training for certifiers.

And then there are those who would say, you know, we can adequately certify it and we are and we are able to meet those standards. So you've got this, you know, broad spectrum of comments even on certification itself.

I think, you know, we are already certifying seaweed, and there are certifiers who are doing that on a global basis.

So I hear absolutely your concern about, you know, coming -- like just the practical standpoint of it. And I think one of the necessities of creating guidelines is also to streamline the ways in which certifiers are interpreting it already as it's already being practiced.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

So I think it also addresses not just the issue of crop certification but can help -- or crop input certification but it can help with livestock and potentially human uses, too.

Harriet?

CHAIR BEHAR: I know this is a daunting task, but there are many resources out there to help us, already people who are looking at sustainability in this area.

So I think the challenge will be figuring out how to use those in the most efficient and effective way and that follow our ethics and rules as well.

But it's not like we're starting from scratch here. There's a lot out there to work with.

MS. OAKLEY: Any other comments?

Sue?

MS. BAIRD: I'm sorry I'm taking up everybody's time.

I'll never forget -- and Margaret Scoles is in the room, so she's going to laugh at me -- when I first did an inspection in Montana

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

because I had come from the Midwest, I'm -- my first inspection out on one of those ranches was to go out and ask them, well, how many cows do you have per acre.

And of course I got laughed at pretty severely because in a high desert it's how many acres, tens of acres of -- do you have per cow. So acknowledging that we don't have that inherent knowledge does not prevent us from being able to realize that we're pretty ignorant and it really is how many acres per cow instead of how many cows per acre, just to comment.

And there are standards out there. I was encouraged to hear that Iceland also has standards, and the presenter from there said that most nations, most countries have standards for harvesting of this crop.

So absolutely we have to pull on their knowledge to build our knowledge base.

MS. OAKLEY: Any final comments on this topic?

All right. Well then, I'll just

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

conclude by saying that I really want to thank all of the stakeholders on this from scientists to certifiers to harvesters and everyone sort of putting their positions and opinions out there.

It can be vulnerable to share your information, and I really appreciate that. I think that we have resources, as Harriet said, available to us. We have scientists that care about this issue. We have stakeholders that care about this issue, and we have harvesters that care about this issue, and certifiers that care about this issue and are all engaged in it. And I continue to be optimistic and think we will find a path forward and hopefully that will be soon.

So thanks, everybody, for taking your time on the subject.

And our next topic before we close the Materials Subcommittee is a verbal update on sanitizers, and I will turn that over to Harriet.

CHAIR BEHAR: So we have been trying to work on a topic of comprehensive review of sanitizers to try to understand which categories

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

of these materials fall into various use types, what would be useful in rotation, and then, of course, the OFPA criteria of human and environmental health and essentiality or necessity.

And so we put out last time a discussion document that had kind of lists of various ways that we could approach the issue, and the National Organic Program -- oh, I guess we also brought in -- after our last meeting, we had Bob Durst from Oregon State speak with the Materials Subcommittee on a conference call along with the Program about the benefits or not.

I just want to say I did NOC. I just sent him the form and I said would you look this over and then discuss this with us. I did not try to influence him in any way, and he liked it.

He thought that was a really good idea, that it would be very useful to the organic community to have -- to look at sanitizers and disinfectants through the lens of the OFPA in a bigger way to help both manufacturers who produce

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

the products as well as manufacturers and farmers who use the products.

However, when working with the Program, they felt that the request was fairly overwhelming.

They did not feel that a technical review -- if they put it out for technical review that anyone would take it on because it was too daunting and too big of an issue.

So being tenacious as we are, we did not just say, well, okay, so next spring there will be a panel and we will bring in some experts to help us go through these products. I will not be sitting up here, but my fellow members and new members will.

And I will help work with the subcommittee until I'm off of the Board in January to come up with some good questions and we will have all of our panelists chosen by then before I leave to help us through this and maybe help us narrow down some of the actual questions that could be the most useful in this area.

So that's pretty much the update. Even

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Devon's shaking his head yes.

MS. OAKLEY: So yeah, I'll just add that we are continuing to discuss this in the subcommittee and we have not taken breaks prior to this meeting because we continue to work on this and other topics. And we won't take one after this meeting.

So we will be developing the list of who to invite and very shortly. And yes.

CHAIR BEHAR: And so if members of the public have any good suggestions for panelists, you know, contact Michelle or me directly.

MS. OAKLEY: Yes, that is exactly what I was going to say. So yes, please provide us with your feedback and we look forward to hearing from those panelists in the spring. And with that, I think the Materials Subcommittee is done and we have concluded our portion of the meeting.

Yep. Are there any questions?

MS. SWAFFAR: Can we comment on this?

MS. OAKLEY: Oh, of course. Sorry.

MS. SWAFFAR: Yeah. Yeah, thanks.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

So this is work agenda item that I am very concerned with, as most everyone knows, just in the direction that it could go, not the direction I think it is going now.

I don't -- I'm very worried about whittling down of the list on sanitizers because it's not a this can work for five things and we should never have any alternatives to that.

So I just want to -- before I get off the Board and I'm only limited to three minutes, I just want to say, you know, we need alternatives for sanitizers so it's not a we can only have one item to sanitize processing plants with. So we need options. So just want to say that before I get off.

MS. OAKLEY: Yes. So I just want to respond to that, which is we did discuss this in the spring as well, and I think it's very clear from the document that was put forward in the spring and our verbal comments that is not the intention.

Intention is a review that is helpful for the Board to determine gaps, to determine, for example, we

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

got this petition for potassium hypochlorite.

However, we've restricted it for irrigation use. Someone might want to petition it in the future for an additional use. It might be a less toxic material than others.

So I think the goal is absolutely not, just to clarify one more time, to limit it down to one material. As you said, that is not -- definitely not our goal.

Tom and Harriet?

MR. CHAPMAN: I was just trying to flag for Ashley. But I understand your intent. I think there was some light made of the Program's resistant to put this out to a TR, I think.

I mean, the reality of this is it's a super complex subject and when you look at rules, FSMA and other rules, they generally dictate outcomes, not specific methodologies or materials that need to be used.

And the reason for that is the variety of threats that come is a constant learning experience, and the variety of production

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

environments of which products are made especially when you consider this review is across livestock, crops, and handling is just -- it's enormous. And each operation is different and they need to address their issues site-specifically.

And so to ask for a single report that could summarize that is a pretty enormous ask.

So you know, the panel sounds like a great approach to start, you know, eating this dinosaur one bite at a time, and I look forward to seeing what they say.

MS. OAKLEY: Harriet?

CHAIR BEHAR: So I know where the fear I think somewhat that we're trying to whittle them down because there have been public comments kind of leaning that way saying that you should get a comprehensive review so you can figure out which ones to get rid of.

But in the subcommittee, we thought about how useful a comprehensive review would be so we have a better idea of the universe because this times -- and I -- that we have voted down

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

sanitizers because we saw one that already was working. And we didn't understand where -- what is the special part to this that -- you know, and of course the petition always says everybody else's sanitizer is worthless and mine's the only one that works.

I know, Ashley, you voted against some sanitizers especially in the teat dip world because we just weren't sure where they all fit in -- and so that was the way we approached it.

We saw the ideas as a good one but not necessarily the reason that was first given to us as the reason why we liked it.

MS. OAKLEY: Steve?

VICE CHAIR ELA: Following up on what comment Ashley said, I mean, when I came on the Board, Joelle came on with me and even though she was only on the Board for a short time, her background was in food safety and I think her words echo in my head. I mean, practical experience does as well on her own farm.

But her words just like on a firm and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

a marine ecosystem, every day is different and every farm is different. You know, her words were that every packing plant and ever processing plant and every input is different.

And to categorize those into an easily discernible -- sorry -- table is nigh impossible.

And so I think that -- I think we recognize that and I'm looking forward to the panel.

I think stakeholders have asked us over and over to do something besides just approve new materials.

I don't think it's going to give us the answer, but at least it'll give us information. And I think this topic is always going to be before us. I don't think it's going to go away. I don't think a TR or a panel is going to solve it.

But at least we will have more information, and from public comment for the onboard will be, you know, it's in the striving for continuous improvement and that -- I -- if we have continuous improvement I think it'll be a darn good day. I'm not sure if we'll even get that far, but we have to start somewhere, so.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. OAKLEY: Any additional comments on this subject?

All right. Thank you, Ashley, for reminding me that we needed discussion on it, and this does conclude the Materials Subcommittee's portion.

CHAIR BEHAR: Okay.

We are going to take lunch and we're just three minutes over. Good job, Michelle, in helping us with the agenda.

MS. OAKLEY: Wait, wait. What about me, man? Didn't I keep us on time?

CHAIR BEHAR: Well, you did a good job.

(Laughter.)

CHAIR BEHAR: Okay. So we come back at 2:00 on the dot, please.

(Whereupon, the above-entitled matter went off the record at 12:34 p.m. and resumed at 2:03 p.m.)

CHAIR BEHAR: Okay. We're in the final stretch. I hope all of you had a chance to stretch.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

There are still a few butterflies over there. If you want to take them home for your kids or whatever, I don't need them.

But I took the last two chocolates.

(Laughter.)

(OFF-MIC COMMENTS.)

CHAIR BEHAR: Okay.

So we are missing a couple, but I think we have a quorum. Yeah. Yeah, we're good.

So I will now turn the meeting over to the Policy Subcommittee Chair Rick Greenwood.

MR. GREENWOOD: Thank you, Harriet.

This should be relatively quick and painless. I don't think there's a lot of controversy here.

What we did as a committee was go through the policy and procedure manual, and I know that Tom had done tremendous amount of work in the past.

We felt there were some areas that needed to be refined and updated, so I'll go through some of them as bullet points.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

We added to the NOSB's secretary's duty to monitor and notify subcommittee chairs periodically of public comments posted during the open docket period just to let people know what was going on in case they needed to see that.

We clarified the language about when the new NOSB chair takes office to match the language that's in one of the sections, and we'll go through that at the end of the day when we have a new chair.

Another type of discussion document petition material was added and we clarified the steps in the material review process for new petition to make sure that everyone was clear on the steps that we needed to take on that.

We added some clarifying language about how a subcommittee determines sufficiency of a petition, and that was one of the things when we look at them, does it really have everything that we need, do we have to add things, what kinds of discussions do we need. So we clarified that.

And we also added a process for the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

subcommittee to develop a discussion document based on a petition. And that was one of the things that we thought was important where we could post those as discussion documents and start getting input.

They're not official documents. They're discussion documents only. And we felt that would let stakeholders have more input during the process.

And then we added an additional bullet point under the section about policy for public communication between NOSB meetings for posting discussion documents and proposals between public meetings for review and public comment.

And again, that's another avenue that we felt was necessary to get public input in essentially an informal way. And I think one of the things that hopefully everyone saw today is public comment is incredibly important for this whole process.

I think the public knows things that we don't know and it brings it to our attention.

So clarifying documents, basically I'll open it

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

up for discussion if anyone has any comments.

We did get a couple of comments during the open period that were in support of the changes.

And so thought that was good that actually people looked at it and felt that some of these things would be helpful for our stakeholders.

CHAIR BEHAR: Rick, you call on the people who --

MR. GREENWOOD: Okay. I'll call on the people and then I'll call on Tom, too.

(Laughter.)

MR. CHAPMAN: Yeah, really good job. I wanted to make sure we had a good, robust conversation about this. So Michelle can you pull up that 60-page PowerPoint I sent you?

(Laughter.)

MR. GREENWOOD: Yeah. Yeah.

MR. CHAPMAN: Oh, it got lost? All right. Sorry. Yeah. Really good job, Rick.

MR. GREENWOOD: Okay. Thank you.

MR. CHAPMAN: You made a lot of good changes. I'm really happy about the petition

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

discussion documents. I think it really leads to a more robust, clear process for everybody.

MR. GREENWOOD: Okay. Yes, Steve?

VICE CHAIR ELA: I actually want to thank Asa for that because it was Asa that brought up why can't we have more discussion, and I think I brought it up on an executive call and then Tom had the idea of -- or maybe I don't know who did of, you know, we could do this. And so I think it really shows where sometimes as we wrestle with time as a Board and how do we have robust discussions without 60-page documents.

But you know, I think it's where individual members bring good ideas and it shows where it works, so.

MR. GREENWOOD: Yeah. Thanks. Okay, any other comments?

(No audible response.)

CHAIR BEHAR: Would you like to read the motion?

MR. GREENWOOD: I -- the motion is to accept the changes to the policy and procedure

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

manual. It was -- the motion was by Steven and seconded by Tom.

(OFF-MIC COMMENTS.)

CHAIR BEHAR: Okay. I'm just trying to figure out where we start. I think it's Lisa. Is that right? All right. I remembered.

MS. de LIMA: Yes. Oh, sorry, do you have --

CHAIR BEHAR: We will now start the vote with Lisa.

MS. de LIMA:

DR. SEITZ: Yes.

MR. MORTENSEN: Yes.

DR. BRADMAN: Yes.

VICE CHAIR ELA: Yes.

MR. RICE: Yes.

MS. OAKLEY: Yes.

MR. BUIE: Yes.

MS. BAIRD: Yes.

MR. GREENWOOD: Yes.

MS. SWAFFAR: Yes.

MR. CHAPMAN: Yes.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

CHAIR BEHAR: Chair votes yes.

MR. RICE: That's 13 yes, 1 absent, the motion passes.

CHAIR BEHAR: Thank you, Rick. Coming on and becoming a subcommittee chair right away, good job.

Okay. Next up is the Livestock Subcommittee which has a few things on the agenda, and I will turn the meeting over to Sue Baird.

MS. BAIRD: Thank you.

Livestock has been rather busy. We're going to start with one petition, the use of exclude methods and vaccines. We will move to 12 sunsets and then we're going to move to a discussion document for revising annotation for fenbendazole.

So the -- we're going to start immediately with a motion to accept the use of excluded method vaccines in organic livestock. And I think that is Harriet. Right. Thank you.

CHAIR BEHAR: Like I said, I like to take on the hard ones.

Okay. And I like to get public

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

comments, so I just write the things that people want to talk about.

So this came out of a work agenda item that we requested of the National Organic Program that came up at the last sunset of vaccines that because it was pretty clear and the certifiers verified that, that there was inconsistent implementation of the two different references to vaccines in the organic rules.

So there is a reference in 105 that talks about excluded methods are prohibited except for vaccines when placed on the National List. That's not the exact wording, but that's what it means.

And then there's also a list on the National List that says that biologics and vaccines are allowed in livestock production.

So some were just looking only at the National List and saying, therefore, all vaccines and biologics are allowed whether or not they are genetically engineered, and others said, no, you have to look at the full regulation and we will

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

not allow them unless they are placed on the National List.

And currently none have been petitioned and none have been placed on the National LIST.

So to find consistency, we looked at a variety of options which we had a discussion document in the spring and now we have a proposal based on the public comment.

We asked should we just accept all vaccines and not look at their genetically engineered status, look at only allowing them, genetically engineered vaccines, if non-genetically engineered vaccines were not available, not commercially available and following the commercial availability requirements of form, function, and quantity, and third, was to stay with the current rule as is and require that all genetically engineered vaccines go through a petition and review and then approval process to go on the National List.

Of those three, most preferred the commercial availability because they basically --

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

as we've said earlier in this meeting and numerous times and in all those public comments, said the organic community does not want to include genetic engineering in our production methods.

However, we're also kind of backed up against a federal wall in that there are vaccines that are federally required in poultry operations over a certain amount, and I think it's 2000 birds -- 3000 birds, that must use certain salmonella vaccines and they are only available in a genetically engineered version.

So if we did the not allowing GMO vaccines at all, or genetically engineered vaccines, then we would knock out all poultry houses over 2000 -- 3000 birds.

We have also had this genetically engineered vaccine statement in 105 since the rule was written and have never received a petition for a vaccine. And so we could see that wasn't working.

What was happening, though, is that some certifiers were not allowing any vaccines and some were allowing everything, and so it really

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

was very inconsistent.

So we went to the commercial availability to basically say if we are not given an option and we are forced into using a genetically engineered vaccine, then we will not take that important tool away from organic livestock producers as a preventative as well as meeting regulations and let them use those genetically engineered vaccines.

And that's where -- now, we did get a lot of public comment. Some said that we should only allow them if they're commercially available and when Government required. Others did not -- so other said don't allow them at all, but that was very few.

To respond to that, that basically kind of takes away the benefit of vaccines as a preventative, and so if there's, let's say, some kind of outbreak and -- well, then it might be Government required or not.

But if the only vaccine is one that is genetically modified and someone's having an issue

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

in their region with their livestock, we need to allow them to prevent that problem. We will lose livestock producers if we truncate the availability of vaccines to them and not -- and none -- no producer wants to watch their animals suffer.

We get a lot of comments from certifiers and others that they needed more guidance on how to find these genetically -- non-genetically modified vaccines and which ones were genetically engineered.

There's quite a bit of information links in the proposal and we also have talked with numerous certifiers about working with the Accredited Certifiers Association in helping develop a list.

I mean, one thing about vaccines is they don't -- it's not like a new vaccine is coming on the market every day or even every week or even every month.

So managing updates shouldn't be too difficult because there's not -- it's not like a fast-moving area. It's not like seed where you

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

could get lots of different varieties coming on.

And I would be happy in the cover letter to kind of spell out a little bit more some of those resources and kind of present which ones are genetically engineered right now and which ones do and do not have non-genetically engineered equivalent.

There was also discussion on what does it look like to be commercially available when you're talking about a vaccine and that is somewhat discussed in the proposal. The method of delivery, regional availability, and I think, too, we could include in the cover letter that if you want to find out if something's equivalent, some documentation from a veterinarian in your area who has some experience with various vaccines to say which one they felt was working well because they're the disinterested third party who knows which vaccines are working and which ones are not.

And that is my summary.

(OFF-MIC COMMENTS.)

(Simultaneous speaking.)

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. BAIRD: Dave?

MR. MORTENSEN: I've been trying to -- in reading through this and thinking about it, I've been trying to equate this to other things that we work on that in the area of how it is that we create incentives for the desired outcome. And Ashley's pointed out that we had the one mechanism where we allowed the use of something as a replacement comes along or ideally.

How much discussion was there about that kind of thing? So let's say we're -- we are in the proposal accepting the use of things that we would ideally rather not use and yet are interested in the short- or mid-run incentivizing alternatives that are aligned with the organic principles.

One approach that I was pondering that might be analogous to this or at least somewhat analogous to this is the EPA has rules in place where they use something called the IR-4 in Section 22(c) program to enable conventional farmers to use off-label uses of pesticides where the USDA

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

is actually subsidizing in part the creation of an alternative that is not financially viable or lucrative for the company to foot the bill for a small use development.

And I'm just wondering if a program something like that couldn't help. That's not speaking to this document right now here and now, but I -- the one concern I have is that once we start doing this, right, as we start allowing for these things to be used more and more, there will be little incentive for any kind of alternative to be developed that I can see.

In fact, it could very well discourage alternatives from being developed and made available. So that's just something I've been pondering as I read this and read the public comment.

MS. BAIRD: Emily, and then Harriet.

MS. OAKLEY: Harriet, if you want to answer that first, then I'll go after you.

CHAIR BEHAR: So I would compare this actually to the commercial availability on seed

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

and that since we've had that, it's actually -- and if the certifiers are requiring it, and as an inspector I can tell you we go through those seed tags and we look at what they're using and what they're not using as far as organic or not.

That has greatly increased the organic seed market. We've seen some things come off the 606 list because we're allowing the non-organic agricultural product be used because we find that the organic one is not available.

But -- so I think if people will be searching and possibly even asking vaccine suppliers or their veterinarian can you please get me the non-GMO version of this, I understand there is one, I think that would be useful in sending the message that there is a market for these non-GMO vaccines.

But I really do love your idea about having some subsidy for vaccine makers to perhaps develop vaccines that are currently not available in a non-GMO version.

So I'm not really sure how we do that,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

but we could pass that on to the Program and let them know that we are interested in exploring that possibility for the future, and thank you for bringing that forward because I didn't know about that.

MS. BAIRD: Emily.

MS. OAKLEY: I think that -- I've talked with a couple of people about this. I struggle with this issue because on the one hand, I greatly appreciate the work that the subcommittee went -- or put into this document, and I really hate to see inconsistencies between certifiers and how they're interpreting and applying the rules.

At the same time, my reading of the rules and regulations are that number two would be the most appropriate option, allow vaccines from excluded methods but only if they were individually reviewed and approved by the NOSB and placed on the National List by the NOP.

So I feel torn about this, but I would -- I would not vote to end inconsistencies between certifiers and my vote will likely be an abstention.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

And I think Ashley is wanting to answer what I have just said.

MS. BAIRD: Okay. Ashley, now.

MS. SWAFFAR: Okay. I've got a lot of points. I'll start with yours, Emily.

So number two, listing by individual vaccines, the subcommittee didn't feel like that was the appropriate approach because nowhere on the National List do we list any branded products, and these would have to be listed by brand, and we didn't feel that that was consistent and that would lead to a very, very slippery, slippery road of starting to List things by brand name.

And so that's why we didn't go with that one.

So onto just my comments on this. You know, I think this is a really huge challenge area for the poultry industry and I'm sure other livestock industries.

But you know, you heard from several poultry producers that the majority of the poultry industry is really trying to put birds outside

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

because that's what we all feel the customers are looking for when they're purchasing organic eggs.

And many companies have actually implemented OLPP and beyond. Actually, a lot of them are putting birds outside at a rate that is anywhere from double to, at my company, 54 times what OLPP set. So you know, we're actually putting birds outside at a really big stocking rate.

And there's huge challenges with that.

And you know, this week alone while we're sitting here, I've had two cases come back from our veterinarian with excessive E. coli, and a part of it is our vaccination schedule that helps with that.

I mean, we do vaccinate for E. coli but we still have flocks that get pretty severe cases.

And the reason for that is climate change. I mean, we are so wet in Arkansas right now -- Emily and I were just talking about this. We've got three inches in like the past 24 hours and it's supposed to keep raining.

But that wet environment are perfect

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

for disease growth and vaccines are critical to help us, you know, get a little bit of immunity there. But we're still seeing a lot of disease outbreak.

So you know, E. coli, necrotic enteritis and fowl cholera are some pretty bad things that are hurting the poultry industry because we are putting birds outside, and vaccines can help us mitigate that a little bit.

And you know, some of those vaccines are only available made from excluded methods, so you know, I really support this because we can't take away vaccines because if we do that and particularly any of these vaccines, you will no longer have commercial organic poultry industry.

And that is, you know, 16.5 million layers out there, and we really need these vaccines.

The salmonella one, like Harriet had mentioned, that is a Federal requirement and the State of California dictates that, so that's one that we have to use.

And then I just want to talk about

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

commercial availability there and really highlight what Harriet had put in the document and what the subcommittee brought forward.

It's not a if it's available or not.

It's if it's available in the correct form, the correct quality -- quality is the big key there - and quantity. Those are key areas that I really want to stress gets pulled forward.

If this passes and the Program puts this into place, that those are really key areas for commercial availability and -- sorry, my last point.

I know there are a lot of certifier concerns on this, but I feel like the subcommittee is bringing forward a good document, and you know, it's not always our job to tell you the exact details of how to implement stuff to that level of detail.

I think there are groups such as the ACA, you know, coming up with a working group and a list to kind of identify those vaccines that are made from excluded method is a really great step.

And you know, I -- we heard from a lot

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

of certifiers that this would create a huge burden on time and work. And there are not vaccines being developed all the time.

I mean, like in the poultry industry in the past 10 years, I mean, I can think of a couple that's probably been developed.

So you know, it's not like it's going to keep continually update this List. So that's kind of that.

That's my thoughts for now. Maybe later I'll have some more.

MS. BAIRD: Dan.

(OFF-MIC COMMENTS.)

DR. SEITZ: So this is a large complex topic in a way very similar to the seed integrity transparency topic.

And I feel that we've actually reached a realistic middle ground. So I just want to say that I feel very comfortable with this as I felt comfortable with the seed integrity transparency document that we approved.

It's realistic. It will take some

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

work. It's seeking a middle ground, and it's trying to, as best we can with a complex topic, find a middle way --

MS. BAIRD: Okay. Rick?

MR. GREENWOOD: No, I think Ashley brought up a good point. In the sense that we need to have that as a tool because we live in a global economy now and if you think back, West Nile didn't exist in the U.S. and then suddenly it roared across the country.

We're going to have other West Niles and other things, and we need the capability of getting a quickly engineered vaccine. I mean, it may not be what we want, but we need that if we're going to do it.

And that goes with all kinds of animals, not just chickens. And it goes with people.

And I had mentioned it to Tom yesterday.

I had the rabies vaccine because I used to work with live rabies in the old days and it was a duck embryo vaccine. The side effects were horrible, and it was -- didn't work.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

And then a few years later, there was a cell culture vaccine which gave me a great titer.

And so I'm not really livestock, but it -- I think there's a lesson to be learned there that we need those.

MS. BAIRD: Emily.

MS. OAKLEY: I just want to clarify that I'm not against vaccines at all. I didn't want that to be confused with my statements.

I still just struggle, as you were talking about, you know, we don't want to set a precedent of posting or listing name brand materials. And that's one slippery slope.

But I also think taking an alternative approach to what is stated in the rules is also a slipper slope. But I understand the practical reasons that are in place for this. But just wanted to clarify I am not against vaccines.

MS. BAIRD: Scott?

MR. RICE: Yeah. I just wanted to acknowledge, as was already said, that I think it will be initially a lot of work for certifiers on

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

this, but hopefully that's just front ended and we can work together either through ACA or NOP or NMRO to get a comprehensive list and hopefully some resources on how best to determine commercial availability so that we are all on the same page and do this consistently.

But I think as has been said, it's a good middle ground for now, and I felt comfortable hearing from some of our public commenters who while maybe not ecstatic about exactly how this is written could move forward.

MS. BAIRD: Okay. Harriet?

CHAIR BEHAR: I just want to put in the public record, as the writer of this, that I wish that we didn't have to use the GMO vaccines or the genetically engineered vaccines. But -- and I really hope that there's no other aspects of organic production that will be pushed into this situation where we have no other choice than to use the genetically engineered.

So that's -- I don't know where else that might be, but I'm just putting that on the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

public record that this was not really what I don't think the main organic community really wants is to be using them. But we really don't have any choice.

And for animal welfare and food production, we really need to have them in the commercially available category.

MS. BAIRD: Any other comments?

I just want to go on record as agreeing with what everybody says. We inherently hate GMOs.

But we also are mandated to put our livestock outdoors, and when we do that, we inherently put them at risk for diseases.

And I am certainly going to support the commercial availability. I think it is a great first step in being able to move to -- and a statement that we said, you know, if there's something out there, then let's do our due diligence and find it.

So yes, Harriet.

CHAIR BEHAR: While, there could be some diseases and health issues that are caused

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

by being outdoors, there are benefits to it, as well. And so I just -- I wouldn't have a carte blanche that being outdoors means that we need lots and lots of vaccines and all indoor poultry don't need vaccines because they're indoors.

So I think it's --

MS. BAIRD: Right.

CHAIR BEHAR: -- here and there, you know, various different issues are dealt with differently.

MS. BAIRD: Agreed. Thank you.

Any others?

All right. Then I think it's time to call for a vote. And I'm -- oh, yes?

MR. MORTENSEN: To be perfectly clear, because I'm a little confused still. So number three on Page 194 of 230 reads, allow vaccines from excluded methods but only if the vaccine is not commercially available and had not been produced from excluded methods to effectively treat the health issue.

So (e) on the last page, which is what

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

we're voting on, is three on that page. Is that correct?

CHAIR BEHAR: We tried to provide the actual regulatory language that we would like to see changed.

MR. MORTENSEN: Because I guess I asked that question, one, for clarity, but also two, because what just was discussed was drilling into greater detail than what is revealed in (e), like quality and in this locale and the things like that.

I just am curious how precise the wording needs to be.

CHAIR BEHAR: There is a definition in the rule on commercially available which specifically says form, function, and quality.

MS. BAIRD: Right.

CHAIR BEHAR: And quantity.

MS. SWAFFAR: So just under that, at the end or at the bottom of that page, the subcommittee talked about commercial availability, and --

MR. CHAPMAN: I'm going to jump in.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

If you go back to the second page it has relevant areas of the rule, 205.2, terms defined in commercial availability, the ability to obtain production input in the appropriate form, quality, or quantity to fulfill an essential function of the system of organic production. And then it goes on talking about certifier review.

But -- so that's already a section of the rule when we talk about the term commercially available.

MR. MORTENSEN: Okay.

MS. BAIRD: Thank you, Tom.

Any other discussion?

All right. So Harriet's going to read the motion. Yes.

CHAIR BEHAR: I'm giving Sue sign language here.

Okay. We will be voting on the motion to change the USDA organic regulations at 205.105(e), addition to the current rule noted in bold. I don't know how to say that.

But so the current rule is (e) excluded

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

methods except for vaccines provided that -- bold
-- vaccines produced through excluded methods may
be used when an equivalent vaccine not produced
through excluded methods is not commercially
available, period.

MS. BAIRD: Okay --

(Simultaneous speaking.)

CHAIR BEHAR: -- the motion in
subcommittee was by Harriet and seconded by Ashley.

MS. BAIRD: Right. All right. Do you
want to call the vote?

CHAIR BEHAR: So I believe we're
starting with Dan.

DR. SEITZ: Yes.

MR. MORTENSEN: Yes.

DR. BRADMAN: Yes.

VICE CHAIR ELA: Yes.

MR. RICE: Yes.

MS. OAKLEY: Abstain.

MR. BUIE: Yes.

MS. BAIRD: Yes.

MR. GREENWOOD: Yes.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. SWAFFAR: Yes.

MR. CHAPMAN: Yes.

MS. de LIMA: Yes.

CHAIR BEHAR: Chair votes yes.

MR. RICE: We had 12 yeses, 1 abstention, 1 absent, the motion passes.

CHAIR BEHAR: Sue, it's back to you.

MS. BAIRD: All right.

The next -- we will move on to sunsets, and our first sunset will be the motion to remove atropine.

Dan?

DR. SEITZ: Devon, do you have to read something?

MR. PATTILLO: Yeah.

MS. BAIRD: Is that correct, Dan?

DR. SEITZ: Devon is going to read it into the record.

MS. BAIRD: Yes, Dan -- Devon will read it. But -- yes.

MR. PATTILLO: Thanks, Sue.

We're now moving to substances in

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Section 205.603 of the National List which includes synthetic substances allowed for use in organic livestock production and the first listing is 205.603(a)(3) atropine, CAS number 51-55-8.

Federal law restricts this drug to use by or on the lawful written or oral order of a licensed veterinarian in full compliance with AMDUCA in 21 CFR -- 21 C.F.R. part 530 of the Food and Drug Administration regulations.

Also for use under 7 C.F.R. part 205, the NOP requires use by or on the lawful written order of a licensed veterinarian and, two, a meat withdrawal period of at least 56 days after administering to livestock intended for slaughter and a milk discard period of at least 12 days after administering to dairy animals.

DR. SEITZ: So this substance has been on the list as an allowed substance since 2002. It -- we received about a half dozen comments in favor of relisting.

Commenters stated that it's not widely used but it is an essential substance.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

It's commonly administered as a pretreatment for anesthesia during surgical procedures, and it also is used to reverse the effects of organophosphate poisoning.

When used during surgical procedures, it's administered to reduce the secretions of sweat and saliva reducing the risk of airway obstruction.

Sorry. I should have read that more into the microphone. So anyway, the -- that's it. Any questions?

MS. BAIRD: Harriet?

CHAIR BEHAR: Taking another trip down memory lane, this material was put on the National List when we had a veterinarian on the NOSB and numerous of the materials that we're going to be looking at were put on by Dr. Hugh Karreman who is still -- I don't think he's doing much practice of veterinary because he is now an organic dairy farmer in Virginia or --

MS. BAIRD: Yeah.

CHAIR BEHAR: -- Maryland or somewhere, Carolina, somewhere in mid-Atlantic.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

So just thought to let you know that this was put on the National List by a vet who is very active with organic livestock.

MS. BAIRD: Any other comments?

All right. So Dan, you want to read the motion?

I'll read the motion. She read the motion last time. I thought I -- okay. One of the two of us will read this motion.

The motion is to remove atropine from 205.603(a) based on the following criteria which is the OFPA and 7 C.F.R. 205.600(b). Okay.

Call to vote. Harriet?

CHAIR BEHAR: We start with Dave.

MR. MORTENSEN: Didn't I start last time, or not? No? Okay. No.

DR. BRADMAN: No.

VICE CHAIR ELA: No.

MR. RICE: No.

MS. OAKLEY: No.

MR. BUIE: No.

MS. BAIRD: NO.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. GREENWOOD: No.

MS. SWAFFAR: No.

MS. de LIMA: No.

DR. SEITZ: No.

CHAIR BEHAR: Chair votes no.

MR. RICE: That's 13 no, 1 absent, the motion --

MS. SWAFFAR: Point of order, Tom was absent.

MR. RICE: Thank you for clarification.

That is 12 no, 1 -- 2 absent, the motion fails.

MS. BAIRD: Okay. Moving on, the next motion will be to remove hydrogen peroxide. Devon?

MR. PATTILLO: Thanks.

We're still in Section 205.603(a), and the listing is hydrogen peroxide.

MS. BAIRD: And that is Jesse.

MR. BUIE: Hydrogen peroxide is used as a readily available disinfectant and broad spectrum germicide.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

It is an important cleaning agent for use as -- on contact surfaces such as equipment, calf pails, bottles, and utensils.

The material is used to clean wounds and was first registered with the EPA in 1977.

During the spring, NOSB reviewed -- the Livestock Committee received comments in favor of relisting hydrogen peroxide and no comments against relisting.

One commenter stated hydrogen peroxide is one of the most widely used hard surface sanitizers and is generally recognized as safe as an antimicrobial agent and for other purposes by the FDA.

Unlike many alternatives available to organic producers, it is an excellent choice as it readily degrades to oxygen and water leaving no residue.

Are there any questions?

MS. BAIRD: Harriet?

CHAIR BEHAR: I imagine you received many public comments in support of this material?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. BUIE: All in support.

CHAIR BEHAR: Yeah. I see it used a lot on livestock operations.

MS. BAIRD: Absolutely.

Any other comments? All right. Harriet?

Motion is to remove hydrogen peroxide from 205-603(a) based on the following criteria in OFPA and 7 C.F.R. 205.600(b). Motion was made by Jesse, seconded by Ashley.

We're ready to call it to vote.

CHAIR BEHAR: We will start the voting with Asa.

DR. BRADMAN: No.

VICE CHAIR ELA: No.

MR. RICE: No.

MS. OAKLEY: No.

MR. BUIE: No.

MS. BAIRD: No.

MR. GREENWOOD: No.

MS. SWAFFAR: No.

MR. CHAPMAN: No.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. de LIMA: No.

DR. SEITZ: No.

MR. MORTENSEN: No.

CHAIR BEHAR: Chair votes no.

MR. RICE: That's 13 no, 1 absent, the motion fails.

MS. BAIRD: All right. Next up on the agenda is a motion to remove iodine. Devon?

MR. PATTILLO: Thanks.

Iodine is listed twice in 205.603, once in Section (a) as sanitize -- as disinfectant, sanitizer, and medical treatments as applicable, and also in Section (b) as topical treatment, external parasiticide, or local anesthetic as applicable.

I believe we're covering these separately.

MS. BAIRD: Yeah. We're voting separately.

MR. PATTILLO: First one's the listing

--

MS. BAIRD: So --

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. PATTILLO: -- in 603(a) as iodine.

MS. BAIRD: Right.

So this is Ashley's.

MS. SWAFFAR: So we vote separately, but the discussion is the same for both, if that's all right with everyone.

So iodine has excellent antimicrobial qualities and is widely used in organic livestock production as a topical -- topical treatment, disinfectant, and antimicrobial. It is especially used as a teat dip in both premilking and postmilking.

While a clean barn and a clean milking parlor and clean cows are a vital aspect of organic milk production system, barns are not sterile environments, and these antimicrobial teat dips are used in pre- and post-milking are vital preventative healthcare products.

And there are many teat dips available commercially and iodine-based teat dips are the most commonly used in organic livestock production.

We heard from several farmers that said iodine

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

is an essential part of preventative healthcare in milk quality.

We did hear from several consumer groups that have requested that we look at doing an annotation on iodine to limit it to only those without NPE.

And so we talked about that a little bit at the subcommittee level after the spring meeting, and we kind of said, hey, we really kind of want to hear some more info from the public on that before we ask for that as a work agenda item.

And as you may have noticed, I asked -- tried to ask that in several of the dairy farmers that came up. And so we'll take all of that under consideration and talk about it at the subcommittee level on if we'll proceed with that work agenda request, but looks favorable.

Any questions?

MS. BAIRD: Yeah. Thank you, Ashley.

And I think if your comment is pertinent to (a) and not (b) you need to say that, otherwise we'll take comments on both together.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Harriet?

CHAIR BEHAR: AS an organic inspector in dairy country, when I -- somebody -- if I get a file in the mail that I'm supposed to go inspect or receive where I can smell it from across the room. It smells like iodine, not that that's anything, but it's always -- it's heavily used. Let's put it that way. It gets into the paperwork.

MS. BAIRD: I just -- I want to say food safety demands somatic cell count to be low in quality of milk and that could be correlated very closely with the use of iodine as teat dips. I think it's a food safety issue.

Yes, Harriet.

CHAIR BEHAR: Iodine is readily available and fairly inexpensive, but it can be somewhat hard on the skin of that tender skin of the udder.

And so we do have other options, too, for farmers who prefer not to use iodine. And I do know some who don't use iodine at all. They might use glycerine or other items to keep their

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

animals -- the teats from having bacteria go up into the udder.

MS. BAIRD: And I've seen them in combination as well. Any other comments?

All right. The motion is to remove iodine from 205.603(a) -- we're going to vote on each one separately -- based on the following criteria in the OFPA and 7 C.F.R. 205.600(b).

CHAIR BEHAR: We start the voting with Steve.

VICE CHAIR ELA: No.

MR. RICE: No.

MS. OAKLEY: No.

MR. BUIE: No.

MS. BAIRD: No.

MR. GREENWOOD: No.

MS. SWAFFAR: No.

MR. CHAPMAN: No.

MS. de LIMA: No.

DR. SEITZ: No.

MR. MORTENSEN: No.

DR. BRADMAN: No.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

CHAIR BEHAR: Chair votes no.

MR. RICE: Thirteen no, one absent, the motion fails.

MS. BAIRD: We will do a motion to remove iodine from 205.603(b) based on the criteria of OFPA and 205.600(b).

So call the vote, please.

CHAIR BEHAR: Voting begins with Scott.

MR. RICE: No.

MS. OAKLEY: No.

MR. BUIE: No.

MS. BAIRD: No

MR. GREENWOOD: NO.

MS. SWAFFAR: No

MR. CHAPMAN: No.

MS. de LIMA: No.

DR. SEITZ: No.

MR. MORTENSEN: No

DR. BRADMAN: No.

VICE CHAIR ELA: No.

CHAIR BEHAR: Chair votes no.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. RICE: That's thirteen no, one absent, the motion fails.

MS. BAIRD: Thank you.

The next item up is a motion to remove magnesium sulfate from 205.603(a). Devon?

MR. PATTILLO: Thanks.

At Section 205.603(a), the listing is magnesium sulfate.

MS. BAIRD: Ashley.

MS. SWAFFAR: Okay. For my last sunset ever, magnesium sulfate, it acts as a laxative, bronchodilator, electrolyte replacement aid with hypoglycemia and may be used to treat cardiac arrhythmias.

Magnesium sulfate can be added to livestock feed to treat conditions stemming from a magnesium deficiency. Lactation tetany or grass tetany occurs when ruminants graze on grasses low in magnesium or suffer from a low level of magnesium in their diet.

Magnesium sulfate as Epsom salts can be used to treat inflammation and abscesses in

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

livestock by soaking the affected area in a mixture containing Epsom salts and water to reduce the signs of inflammation.

We did receive comment from many dairy producers and the one -- just one of the comments is it's -- they had said was it's important for cows that are actually out on grass because they can be susceptible to the magnesium deficiency, and so they feel that it's a critical item for their cows and broad support for relisting of this.

Any questions?

MS. BAIRD: Discussion?

Motion is to remove magnesium sulfates 205.603 based on the following criteria OFPA and 205.600 (b). Harriet?

CHAIR BEHAR: Voting will begin with Emily.

MS. OAKLEY: No.

MR. BUIE: No.

MS. BAIRD: No.

MR. GREENWOOD: No.

MS. SWAFFAR: No.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. CHAPMAN: No.

MS. de LIMA: No.

DR. SEITZ: No.

MR. MORTENSEN: No.

DR. BRADMAN: No.

VICE CHAIR ELA: No.

MR. RICE: No.

CHAIR BEHAR: Chair votes no.

MR. RICE: That's thirteen no, one absent, the motion fails.

MR. RICE: Okay. The next item up is fenbendazole. Devon?

MR. PATTILLO: Thanks. At Section 205.603(a)(23), the listing is fenbendazole, CAS number 43210-67-9, milk or milk products from a treated animal cannot be labeled as provided for in subpart D of this part for two days following treatment of cattle, 36 days following treatment of goats, sheep, and other dairy species.

MS. BAIRD: That's my item, my topic.

So fenbendazole is a type of parasiticide that is listed as anthomonic.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Absolutely used to evacuate parasitic intestinal worms from internal organs.

The original petition was received in March 23, 2007 and it was added in 2012. They completed a new technical review in '15 and it was voted as renewed 3/15/17.

At that time, NOSB unanimously recommended to lessen the withdrawal time after the application of fenbendazole and additionally to use it -- to add the use of it for fiber animals.

That was voted on and NOP responded to that and published the recommendation and the annotation. That new annotation is effective January 29, 2019.

This is -- EU, Japan, Codex Alimentarius Commission does not allow, as we don't, the regular use of parasiticides, but they all recognize the -- and allow the use as long as there is documentation. They have a doubling of withdrawal times.

We've heard overwhelmingly support for relisting this. There were a couple of comments

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

-- public comments that we -- because the withdrawal time has now been lessened significantly they would urge NOP to move forward on the adoption of the emergency treatment which states, and I just wrote it down so I could read it, emergency treatment for parasiticide control in breeding, dairy, and fiber bearing animals and urgent non-routine solution in which the organic system plan preventative measures and veterinary biologics are proven by laboratory analyses or visual inspection to be inadequate to prevent life-threatening illness or to alleviate pain and suffering.

Haven't heard anybody that says that they don't -- I got no negative comments on this. Any comments?

CHAIR BEHAR: Just to make it clear that when -- at last sunset, this was not approved for poultry and the approval for poultry just came --

MS. BAIRD: Yes.

CHAIR BEHAR: -- up.

MS. BAIRD: We're not introducing

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

poultry at this time.

CHAIR BEHAR: No, I know.

MS. BAIRD: Yeah.

CHAIR BEHAR: I'm just pointing out why it's not -- why poultry is not listed there.

MS. BAIRD: Any other comments? Yes, Dave.

MR. MORTENSEN: One of the concerns that I have -- and this -- admittedly this is not my area, but when we're talking about concerns about the use of chlorine, you know, we're into some pretty, pretty highly synthetic and very strong compounds here, obviously, if it's going to evacuate the system of a mammal.

And so it concerns me, and I know this is not the application that the fellow was speaking about that was describing the threshold-based IPM treatment trigger.

But it's not clear to me here. How is it being determined that the organic system plan that was approved for preventive management is not preventing the infestation? How is that done?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Could someone answer that?

MS. BAIRD: Ashley? Oh, Scott. I'm sorry.

MR. RICE: You're asking how the preventive practice is evaluated?

MR. MORTENSEN: No. Actually what I'm asking about is this reference in the very first paragraph. It says parasiticides are prohibited and blah, blah, blah when an organic system plan that was approved for preventive management does not prevent infestation.

How is that determination made that the system plan didn't prevent infestation?

MR. RICE: I think it's -- I mean, you're essentially addressing the preventive plan that is in place and documented in the organic system plan. So it would be looking at records of, for instance if pasture rotation would have helped in this and any other measures that the producer could have undertaken.

MR. MORTENSEN: But then -- and then after that's done, Scott, what I'm meaning to ask,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

and probably not very clearly, who's determining that fenbendazole is now the solution to the problem?

MR. RICE: I see an eager answer.

MS. BAIRD: Harriet?

CHAIR BEHAR: I'm sorry. There will be an inspection. There will be a discussion at the inspection, what are the parasites that you're having, are you aware of their life cycle, their reproductive capabilities and then talk with the producer.

So they -- let's say it's a rule that if you don't pasture an area for 30 days then all the larvae are gone, but they will take back in every 15 days, well then, those preventative measures are not being done.

So it's really a conversation with -- between the inspector and the farmer with the certifier overseeing what's in the plan and then the report from the inspector of what they heard and then the certifier makes the determination if the preventative measures are sufficient.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

And there are times when the certifier will say, to prevent this infestation so you don't have to keep using the parasiticides you need to lengthen your rotation times on your pastures or allow the pastures to get taller so the animals are not eating down at ground level, depending what kind of animal, because sheep always eat down at ground level but cows would prefer not to.

MR. MORTENSEN: And do we have a sense for how evenly across the certifier body the determination would be made?

What I'm getting at obviously is, you know, you could be pretty loose and free with this or you could be very conservative in the way it's prescribed.

I recognize you don't want to be evacuating animals if you don't have to, but I also could see this based on the range of farmer attitudes of farmers that I've interacted with where you could have folks that would be -- want to be very conservative in the administration of such a treatment and those that would be much less

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

so.

MS. BAIRD: Ashley, then Scott next, and then I want to respond after that.

MS. SWAFFAR: So people have to do a physical and biological control before you use a synthetic like a chemical control. So that's your first and foremost and that's part of your organic system plan.

And then I think the big piece that you probably are wanting to know is what triggers an emergency to actually let someone use this. And that's a document that we worked on -- was that last year or the year before? Yeah, just before you came on the Board we put a document forward that defined what an emergency is. And the Program has yet to put that out there.

MR. MORTENSEN: Okay.

MS. SWAFFAR: So we -- you know, we heard that the last time that fenbendazole came through, which we were on the Board for that. And so you know, we carried that work forward because there was concern that people were overusing that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

term emergency, so we wanted to do that, so put that forward.

So there are controls in place that are coming, but you know, first and foremost, you rely on that certifier when they're reviewing that organic system plan to make sure that physical and biological controls are used first.

MR. MORTENSEN: Okay.

MS. SWAFFAR: Before a chemical.

MR. MORTENSEN: Okay.

MS. SWAFFAR: So.

MR. MORTENSEN: Thanks, Ashley.

MS. BAIRD: Scott?

MR. RICE: And just a quick clarification on -- we -- as a certifier, we wouldn't tell the producer what they can do. We would ask them to give us a plan for how they will successfully address the issue.

MS. BAIRD: And then I want to respond, then Harriet.

As a beef producer, the need for any of these parasiticides are really, really dependent

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

on the species of animal. Beef animals I've got a full rotation plan. I very seldomly ever have to use it.

But a sheep or goat, they die within a day or two. They get full of worms and they're going to die.

So it's -- first of all, it's dependent on the species of animal, and it -- as Scott said, you have to outline in your system plan. I know from past history that -- and from the biology of the worm, I know that every 30 days I've got to get those animals off of there, give those time for the larvae to die.

And then there are tools that you can use and they described that for poultry, but it's the same for sheep or for cows. They -- you take a fecal sample, you float those -- you see the ovocytes of the worms. And you've got a certain established number that you would tolerate. And it's back to that, you establish toleration. I don't -- Scott doesn't tell me. I say, you know, I can tolerate -- my beef cow can tolerate pretty

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

high loads, so I'm going to let it develop its own.

But if it was a sheep, I would say, man, I'm going to get rid of these worms or it's going to die because they will. They just turn up their feet and die.

So it's all based on the system plan.

It's based on science and -- you know, they do.

I mean, they just die. They like to die sometimes, I think, especially in wet climates. And it's also based on the climate you're in.

We -- I talked to friends in Colorado because it's a high desert. They don't have the worm issues, the parasite issues up there for their sheep as we do in Missouri. You can't -- I mean, you just have to have it. But it is all based on a plan that you propose to your certifier. They review it and then the inspector verifies it.

And Scott you had a -- did you have something? I thought there was one other hand I saw. Harriet.

CHAIR BEHAR: As an organic inspector who inspects goats, sheep, and dairy cows, since

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

this has -- the days have lessened, and of course this is just anecdotal. I have not seen increased use.

MS. BAIRD: As with any drug, we're here to take care of our animals, but we certainly don't want to put any more money into giving them drugs that they don't need.

There's just -- I mean, if for no other reason, for economical issues, not just because we love our animals. And I do. Any other comments?

Okay. I think we're ready to call it to vote. Fenbendazole CAS 43210-67-9 milk or milk products from a treated animal cannot be labeled as provided for in subpart D of this part for two days following treatment of cattle, 36 days following treatment of goats, sheep, and other dairy species. Harriet.

CHAIR BEHAR: We'll start the voting with Jesse.

MR. BUIE: No.

MS. BAIRD: NO.

MR. GREENWOOD: No.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. SWAFFAR: No.

MR. CHAPMAN: No.

MS. de LIMA: No.

DR. SEITZ: No.

MR. MORTENSEN: No.

DR. BRADMAN: No.

VICE CHAIR ELA: No.

MR. RICE: No.

MS. OAKLEY: No.

CHAIR BEHAR: Chair votes no.

MR. RICE: That's thirteen no, one absent, the motion fails.

MS. BAIRD: Thank you, guys.

That -- I appreciate that discussion.

That was fun. The next one is the motion to remove moxidectin.

MR. PATTILLO: Thanks, Sue.

Continuing Section 205.603(a)(23), the listing is moxidectin, CAS number 113507-06-5, milk or milk products from a treated animal cannot be labeled as provided for in subpart D of this part for two days following treatment of cattle, 36 days

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

following treatment of goats, sheep, and other dairy species.

MS. BAIRD: All right. This one also is my material.

Moxidectin was reviewed at the same time as fenbendazole. It actually -- it was pulled back by NOP which said that moxidectin not only is anthomantic but it also is effective against arthropod parasites using antibiotic method.

Subsequent with that, a lot of public comment stating that this was not used in an antibiotic function and NOP studied those public comments and agreed, so it was listed in 2012.

Moxidectin has been shown to be very benign. In fact, of the three, which would be, the other third was ivermectin, which was pulled off, for dung beetles in the soil, moxidectin is the most benign. It peaks in two days in the feces after treatment, decreases to less than 10 parts per billion by 36 or 37 days, addressed by the same annotations as is fenbendazole.

So, discussion. Harriet?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

CHAIR BEHAR: So these two parasiticides were put on the list to offer parasiticides to organic producers but also to be able to remove ivermectin which has very negative effects on dung beetles out in the pastures.

And we need both parasiticides, and I can't -- I think fenbendazole doesn't work for hogs.

I can't remember which one is -- no, maybe it's moxidectin. One of them doesn't work -- you can't use on swine.

MS. BAIRD: I think it's the fact that the parasites build a resistance, so you have to keep them -- you need both. You need a rotation of your parasiticides. Ashley?

MS. SWAFFAR: Yeah, this is prohibited in slaughter stock, just saying. So you wouldn't be using them in swine.

MS. BAIRD: Yeah.

CHAIR BEHAR: They usually give it to the brood sows before gestation.

MS. BAIRD: Any other discussion?

Okay. Call the vote. Moxidectin, the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

motion was to remove moxidectin from 205.603(a).

There it is. And so Harriet, call the vote.

CHAIR BEHAR: We're starting with you,
Sue.

MS. BAIRD: No.

MR. GREENWOOD: No.

MS. SWAFFAR: No.

MR. CHAPMAN: No.

MS. de LIMA: No.

DR. SEITZ: No.

MR. MORTENSEN: No.

DR. BRADMAN: No.

VICE CHAIR ELA: No.

MR. RICE: No.

MS. OAKLEY: No.

MR. BUIE: NO.

CHAIR BEHAR: Chair votes no.

MR. RICE: It's thirteen no, one
absent, the motion fails.

MS. BAIRD: Next substance coming
forth is peracetic acid, peroxyacetic peracetic
acid.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. PATTILLO: Thanks, Sue.

In Section 205.603(a) (24), the listing is peroxyacetic/peracetic acid, CAS number 79-21-0 for sanitizing facility and processing equipment.

MS. BAIRD: This is Jesse's.

MR. BUIE: According to the TR line 88, peracetic acid is listed for the use in organic livestock production for sanitizing facility and processing equipment.

This is consistent with the substance's primary use in food industry as a bactericide, fungicide, and for sanitizing and disinfecting structures, equipment, and hard surfaces.

During the spring 2019 NOSB, the Livestock Committee received comments in favor of relisting peracetic acid and no comments against relisting.

The NOSB previously reviewed peracetic acid as a disinfectant, sanitizer, and medical treatment in accordance with 205.603. Peracetic acid is recommended for relisting based on the available 2000 Technical Advisory Panel.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

The technical review of March 2016, the unanimous NOSB 2017 support of this material, and the lack of new scientific or meritorious information.

The NOSB reviewed few materials for use in barns, stalls, stables, and milking parlors, leaving relatively few options for producers. Are there any questions?

MS. BAIRD: Any discussion?

Seeing none, we're going to move a motion to remove peracetic acid from 205.603(a) based on the following criteria which is OFPA and 7 C.F.R. 205.600 (b). Harriet?

CHAIR BEHAR: Okay. The roulette wheel has ended up on Rick Greenwood.

MR. GREENWOOD: No.

MS. SWAFFAR: No.

MR. CHAPMAN: No.

MS. de LIMA: No.

DR. SEITZ: No.

MR. MORTENSEN: No.

DR. BRADMAN: No.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

VICE CHAIR ELA: No.

MR. RICE: No.

MS. OAKLEY: No.

MR. BUIE: No.

MS. BAIRD: No.

CHAIR BEHAR: Chair votes no.

MR. RICE: That's thirteen no, one absent, the motion fails.

MS. BAIRD: Next substance is xylazine. Dan? So Devon?

MR. PATTILLO: Thanks. At Section 205.603, the listing is xylazine. Federal law -- sorry, CAS number 7361-61-7.

Federal law restricts this drug to use by or on a lawful written or oral order of a licensed veterinarian in full compliance with AMDUCA and 21 C.F.R. Part 530 of the Food and Drug Administration regulations. Also for use under 7 C.F.R. Part 205, the NOP requires use by or on the lawful written order of a licensed veterinarian and a meat withdrawal period of at least eight days after administering to livestock intended for

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

slaughter, and a milk discard period of at least four days after administering to dairy animals.

MS. BAIRD: Dan?

DR. SEITZ: So the motion is to remove xylazine from Section 206.603(a) based on the following criteria in the Organic Foods Production Act and/or -- well, and/or 7 C.F.R. 205.605(b) if applicable.

So xylazine is used as a sedative, analgesic, and muscle relaxant in veterinary medicine.

As a medical treatment, it can be administered intravenously, intramuscularly, subcutaneously, or orally, usually as a water-based injectable solution.

Let's see. Xylazine's sedative properties are due to its depressant mode of action on nervous system synaptic receptors. Sedation of animals is necessary for both planned medical procedures and emergency procedures to prevent pain and suffering of animals as well as injury to veterinarians performing the procedures.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Xylazine is commonly used in conjunction with tolazoline, which is a reversal agent for a sedative such as xylazine. And tolazoline is also listed as on the National List and it's been I think listed with us -- with the NOSB since about 2000.

We received about a half dozen comments in support and the comments said that it was a critical substance to have available for veterinarians.

And there was one comment opposed to the relisting that stated that the FDA does not allow the use of xylazine in domestic food producing animals. And I did find a regulation, an FDA regulation that does indeed say that.

So we're in this somewhat awkward situation where one agency is saying that that can't be used for food producing animals.

It can be toxic to human beings if not administered correctly. And there are no effective natural non-synthetic alternatives available. Any questions?

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. BAIRD: I -- yeah, that's an interesting situation that we're in. And we've been in it before that we've approved something and then turned out by FDA that it's not allowed.

That's something I think that we need to address at a later point perhaps. Any other comments on that?

CHAIR BEHAR: I think it's allowed if a veterinarian --

MS. BAIRD: Dan's saying that he found a paper that it was not allowed for food -- for slaughter animals at all.

DR. SEITZ: Limitations: do not use in domestic food producing animals and do not use in cervidae less than 15 days before/during the hunting season. And also it specifically says do not use for horses that are going to be used for human consumption.

MS. BAIRD: Horses are used for human consumption in a lot of countries, and indeed, some do here in United States. That's not --

DR. SEITZ: Sure. No, no, I -- no, I

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

-- I'm just saying that that's what the regulation says. Yes. Right.

MS. BAIRD: Harriet.

CHAIR BEHAR: I'm going to -- I seem to remember -- I mean, we go through these materials months and months ago, but I think we did talk to the Program about this.

And so I don't know if -- and I think Devon clarified that it was -- is that ringing a bell for -- I see Ashley kind of shaking her head yes.

MS. BAIRD: I -- yeah, I thought that --

CHAIR BEHAR: So I'm going to put Devon on the spot and see if he remembers anything about it.

MR. PATTILLO: Is it -- sorry, can you repeat, does the question have to do with what animals xylazine --

DR. SEITZ: No, no, just that -- the question of whether there's a different -- a federal regulation from the FDA that somehow is --

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

complicates our approval because they have a limitation on it, on -- for meat producing animals.

I mean, I'm with Sue that we should probably just approve it and then see down the road if there's some issue there that needs to be addressed.

MS. BAIRD: I thought we found out that it was allowed.

DR. SEITZ: Yeah.

MS. BAIRD: Ashley.

MS. SWAFFAR: Give me just a second. I'm pulling up the link.

MR. MORTENSEN: I guess I would just say I'm not with Sue. If that's not clear, that needs to be clear in my opinion before we --

MS. BAIRD: I thought that we did -- because this did come up during the discussion, and I thought that we traced back that end citation. We found out that it was allowed.

But Devon, do we have some background on that? I know you do because you were the one who found it.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MS. SWAFFAR: Devon, you sent us an email on July 24th at 9:34 a.m.

(Laughter.)

MR. PATTILLO: There we go. I stand by that.

(Laughter.)

MS. BAIRD: Ashley.

MS. SWAFFAR: I'm pulling it up to see what it -- it talked about extra-label --

MR. PATTILLO: Extra-label drug use.

MS. SWAFFAR: Yeah. Sorry, I got --

CHAIR BEHAR: Around what date was that, Ashley, so I could try to find it?

MR. PATTILLO: I mean, usually if --

MS. SWAFFAR: July 24th, 9:34 a.m. Central.

(Simultaneous speaking.)

CHAIR BEHAR: See, we hold on to all the emails, Devon.

MR. PATTILLO: I know. That's good. Better than my memory, apparently.

Yeah, in many cases, I mean, the FDA

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

provides for extra-label use of approved drugs, which means that if a certain animal is not included on a label, it could still be used in some cases.

MS. SWAFFAR: Yeah. So I'm in the FARAD database here. And xylazine meat withdrawal time is four days, and our annotation is eight days, which is doubling.

The milk withdrawal time is 24 hours, and our milk discard time is 4 days. That's not fair to them, but it's more -- it's four times what they say is the withdrawal time.

MS. BAIRD: So are you clarifying that it is allowed for slaughter animals as long as there's the withdrawal?

MS. SWAFFAR: Yeah. On FARAD on the lookup for xylazine, it says meat withdrawal is four days.

MS. BAIRD: Okay. Harriet?

CHAIR BEHAR: Without that we're restricting it to a veterinarian --

(Simultaneous speaking.)

MS. BAIRD: Absolutely, yes.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

CHAIR BEHAR: -- is going to I think -- then the onus is somewhat on them to be up to date on the laws as Devon said in certain circumstances and those veterinarians should know what those are. We're not just an over-the-counter, you know, go down to your local feed mill, buy it, and use it.

DR. SEITZ: Yeah, I would say that's a good point. So if there is a prohibition, the veterinarian should know of it and abide by it.

MS. BAIRD: Any other discussion?

Okay. I think we'll go to move for -- to vote -- motion to remove xylazine from 205.603(a) based on the following criteria OFPA and/or 7 C.F.R. 205.600(b).

Harriet.

CHAIR BEHAR: We start the merry-go-round with Ashley one more time.

MS. SWAFFAR: No.

MR. CHAPMAN: No.

MS. de LIMA: No.

DR. SEITZ: No.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. MORTENSEN: Abstain.

DR. BRADMAN: No.

VICE CHAIR ELA: No.

MR. RICE: No.

MS. OAKLEY: No.

MR. BUIE: No.

MS. BAIRD: No.

MR. GREENWOOD: No.

CHAIR BEHAR: Chair votes no.

MR. RICE: That's twelve no, one abstain, one absent, the motion fails.

MS. BAIRD: The next material is DL-methionine. Devon?

MR. PATTILLO: Thanks.

At Section 205.603(d), the listing is DL-methionine, DL-methionine-hydroxy analog and DL-methionine-hydroxy analog calcium, CAS numbers 59-51-8, 583-91-5, 4857-44-7, and 922-50-9 for use only in organic poultry production at the following pounds of synthetic 100 percent methionine per ton of feed in the diet, maximum rates as averaged per ton of feed over the life of the flock, laying

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

chickens 2 pounds, broiler chickens 2.5 pounds, turkeys and all other poultry, 3 pounds.

MS. BAIRD: This is Harriet's.

CHAIR BEHAR: So if you would count how many in the public comments this would have been commented on the most in this docket. Of course, many of those were somewhat of a form letter against methionine.

There -- so there was some comments about -- from Organic Farming Research Foundation that there's research going on on high methionine crop varieties that maybe would help lessen the need for synthetic methionine.

And a lot of the comments that wanted to remove methionine from the National List stated that if animals go outside they don't need methionine. And that really is not true.

It is true that the synthetic methionine lessens the concentration in ammonia in the houses because the protein received from natural sources is not in the right amino acid percentages, so some of that protein bypasses the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

digestive system and ends up in the fecal matter and then causes high ammonia.

So by adding the extra synthetic methionine, you can have a better balance of amino acids from natural sources and not throw off that balance.

Outside access, bugs, grass, dirt, does not provide methionine in significant quantities to then do the essential aspects of methionine intake does for poultry which is improved feather cover, good -- you know, good and stable growth, and with chickens they really -- if they see bare skin, they start pecking at it.

And so if a bird is not feathered well, you're going to have cannibalism and have you ever heard the phrase pecking order? And you don't want to be at the bottom of it.

That's what happens in a flock of chickens is those ones that have poor feathering are really -- if they can survive, and many of them don't. And there's nothing worse than watching that.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

And they're not doing it out of -- you know, they're not bullies. It's just kind of part of their DNA to go after bare skin and especially red.

There's challenges. Ashley has pointed out that most of our chickens don't have year-round access to insects outside to be able to get that methionine while black soldier fly larva -- no, black soldier fly beetle larva is promising in order to fill -- feed the -- what did Ashley say, 16.5 million birds. That's a lot of black soldier fly beetle larvae and we definitely are not ramped up to produce that.

We really need to be providing our poultry balanced rations both for the health of the poultry and for the economic viability of our poultry producers, especially the egg producers if they don't get, you know, 90, 95 percent lay, that expensive chicken feed is an economic hardship to buy. So they need to keep up the lay and having a high lay in an egg flock, it doesn't hurt the chickens at all.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Let's see. So for both the bird health and welfare standpoint and for environmental risks like the high ammonia in the chicken houses, it's important to retain this level of methionine as written in there for the various types of poultry, laying hens, boiler hens, turkeys, and all other poultry, at those levels.

If you remember, I asked my chicken feed supplier -- everybody knows Ernie -- if he was offering laying rations so the flocks would be able to follow the rule because we changed it to not just so much per ton but so much per ton over the life of the bird.

And he stated that he is doing that.

So he will be able to offer that because they need higher methionine when they're young and growing, and at peak production, and then when they're starting to get on the lower end of the curve there, they can use less. And then they'll be at this amount.

So I think this will be -- this -- I hear from the certifiers that everything is going

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

well with the implementation of this. And as an inspector, I usually get there when the birds are young, so I don't see what their later rations are, but I'm being assured that the rations are available.

So with that, we can have a -- I guess one more thing. I would really love to see actual research on whether or not birds out on pasture really don't need methionine. And I have spent time looking for that because this is the opinion of the 10,000 people that said that in our public comment.

But I've looked in European animal magazines and really tried to search for any research and proof that a bird that's even out in a hundred percent pasture would get enough methionine from -- without having that synthetic methionine in their ration. I just haven't seen it.

So I challenge the audience and the people who don't want the methionine to bring forward some research so we can really see that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

those assertions are true.

MS. BAIRD: Comment? Sure.

DR. BRADMAN: I have a --

MS. BAIRD: Asa?

DR. BRADMAN: -- question. I'm just trying to understand DL-methionine versus L-methionine.

Do we -- what -- is it -- because it was --

MS. BAIRD: D -- yeah.

(Simultaneous speaking.)

MS. BAIRD: There's a DL and there's an L. Yeah. It's a different chemical formulation.

DR. BRADMAN: Both chimers, chimeras, or whatever, chimers are nutrient protein or is it just one form?

MS. BAIRD: We need a chemist. I think L is the natural form and DL-methionine is the synthetic form analog of L-methionine.

DR. BRADMAN: Okay. Okay. Because one thing that I'm kind of seeing in the literature

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

with respect to this is that there is a lot of work out there trying to find natural sources of --

MS. BAIRD: Right.

DR. BRADMAN: -- methionine. There's also a lot of work going -- GMO work going on to try to create bacteria or other substrates or perhaps even incorporate into plants genetics that will produce a higher methionine content in the feed.

But as far as I can tell, you know, that's down the road. And the main source is this chemically produced methionine as a synthetic protein.

MS. BAIRD: Right. Well, I have to say my mantra, which is that chickens are dinosaurs, that they're not a derivative or downline of dinosaurs. They are dinosaurs by DNA and they are omnivores, and they are inherently -- their inherent nature is to eat protein.

And you put a chicken out and let it find a mouse, you'll find how quickly -- they need protein. They need DL-methionine. They need

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

methionine. That is their inherent genetic limiting factor.

And when we in our wisdom dictated that meat and bonemeals, which was the source of methionine in conventional -- when we said they would not allow meat and bonemeal to supply that methionine, we had to find another way to do it, and we've allowed DL-methionine, the chemical analog from that point on.

I remember Anne Fanatico, and I don't know if a lot of you remember her from ATTRA, which is the University of Arkansas, and she dedicated eons of time trying to find a natural form of methionine that would supply the sufficient amount of methionine.

The University of Arkansas has had grants to be able to do that. So this is not a new subject. It is, indeed, a health issue for the birds.

I -- Ashley.

MS. SWAFFAR: Thanks, Sue. You stole my thunder on one of my points.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

But yeah, so I just want to say that is the ultimate need of why we need synthetic DL-methionine is because we have birds that are now vegetarians that are never supposed to be vegetarians. And we can't supply the needs of the birds through cereal grain ration. So we have to supply them with methionine. Methionine is an essential amino acid, so it's a first or second limiting amino acid.

So if -- you know, if you take a cup and you only fill it up to partway, everything else only goes to that way. They'll never reach maturity, growth potential, feathering if you restrict the diet by not having that in there.

One, you know, talked about research and that you're wanting to see that birds on pasture, you know, do they or do they not need methionine. You know, I think if someone does that research study, it's important to realize that in the U.S. we have chickens in every state and there's a lot of states that are cold and there's no out.

You know, even if they are marketing

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

a pasture-raised bird with ample outdoor space, I mean, it's snowing, snowing in Texas today, you know. And so that outdoor access alone does not meet the needs of a diet.

And then Harriet, I want to take, you know, offense to one of the things you said in your thing, and it's -- you said it's about economics, and it's not about economics.

As all of you can tell, the poultry industry is a very passionate group and we just want to provide balanced diets to our birds, so it's not economics to that.

We want our birds to, you know, grow to their potential and, like you said, all the things you said, feather cover, and cannibalism is a real thing. And that's what -- I mean, it's bad if you get a flock that starts picking because they'll pick feathers when they're low on methionine. Feathers are a great source. They'll start picking them off of each other and start eating each other because they're -- you know, we forced them to be vegetarians in the organic world

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

and that's not the life they want to live, so.

MS. BAIRD: They will literally eat each other inside out. They have to have methionine. Yes.

CHAIR BEHAR: I just want to clarify that our rule says that meat and poultry slaughter byproducts cannot be fed to meat animals and poultry -- organic. That's just the actual wording.

MS. SWAFFAR: Yeah.

CHAIR BEHAR: And so it's all organic livestock cannot receive any byproducts of other livestock.

And I just -- I guess the reason why I brought up the economics was because if you have a substandard flock, if you say, okay, you know, we're going to give our chickens a half an acre apiece and we're going to, you know, fill it up with chipmunks so they can catch, you know, meat or whatever, whatever your organic system might be to try to get it outside, I mean, that's really unrealistic and not economically viable to try to have an outside flock that could get -- possibly

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

get enough methionine without any supplement.

MS. BAIRD: Yeah.

CHAIR BEHAR: And so you know, it doesn't -- it -- and if you don't -- if you have a substandard production flock, it means that they are unhealthy.

MS. BAIRD: Dave.

MR. MORTENSEN: In several places in this document and in the research priorities and in a number of the more detailed public comments that we received on the subject, there was an indication that breeds of poultry vary, I had the sense, largely in their methionine requirement, and that one cultural practice is breed selection.

Is that true, and are organic farmers using breeds that are low methionine requiring breeds?

MS. BAIRD: Ashley.

MS. SWAFFAR: Yeah, so chickens are chickens. Everybody has -- they all have the same requirements. It's just the days that it takes for grow-out.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

So I mean, they're still taking the same amount. It's just over a longer time, you know.

MR. MORTENSEN: Well, I guess -- I mean, the comment is that chickens aren't chickens, that there are distinctions between breeds. So I'm --

MS. SWAFFAR: Yeah, to -- for every pound of meat it takes the exact same amount of DL-methionine. It's just taking it over a longer period of time. So you're not getting any less with a slower growing bird. It's just eating it over a longer period of time.

And the one thing I want to say about breeds, that is a broiler statement more so than it is a layer statement. There are other breeds of broilers that are readily available in Europe that are not available in the U.S. And there are -- well, I'll say there are some available in the United States in the broiler layer.

On the layer level, we have right now four breeds, brown birds, in the United States. All their cousins are the same ones from Europe.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

They're all owned -- the genetic companies are actually European genetics. So I mean, all -- that's the same bird Europe and America on the layer level, so.

MR. MORTENSEN: I guess I will just say that I have a concern that we're -- by approving things like this -- and I see the argument for it, but by approving things like this, I think we're -- we run the risk of locking in to a system that will be very hard to break out of.

I don't -- I really find it hard to see how, you know, we really explore alternatives when we have a pretty easy fix. I mean, Ernie's fix was pretty straightforward, just mix it in and sell the ration based on the life stage of the bird.

I don't see -- or I find it hard to believe or see how changes to other breeds, particularly -- particularly as the houses become bigger and bigger and the birds are in closer and closer proximity and all of this.

So it's a concern I have. I don't know what the answer is. Other than that by taking away

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

incentives for change, we're I would say pushing toward a more strongly locked in system where it will be dependent on this for a much longer period of time.

MS. BAIRD: I'm sorry. I've got to respond. The Methionine Task Force has worked diligently from the beginning of time and put a lot of, lot of, grant monies into several different universities trying to find an alternative, and they continue to find -- try to find alternatives for providing synthetic methionine.

It's just that poultries are dinosaurs. And to your comment that laying breeds are Europeans, when I was in broilage, the same genetics go back and forth across the water. It's the same genetics.

So yeah, there are those breeds out there that may grow bigger, they may grow slower, some of them, I think, probably are more prone to going outdoors than others. Part of that is training, but we've got organic poultry producers who are deliberately doing every method that they

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

can to get those birds outdoors such as Ashley was describing.

It's just like dairy animals. We don't put those dairy cows out there in Wisconsin and Pennsylvania out in the middle of feet of snow.

And in Missouri it's pretty easy to leave them out year around. You don't put chickens out in feet of snow.

Yes.

CHAIR BEHAR: Dave, I have the cutest little flock of chickens you'd ever want to see.

They're all heritage breeds. Takes them 20, 24 weeks to start laying eggs, which is, you know, significantly longer. But then they last longer, too. And they need methionine. And I would like to call a question.

MS. BAIRD: Is there no more discussion then? Is that what you called? Okay. Then --

MR. CHAPMAN: No one seconded it, so we don't have to vote on it, but if people still want to talk, I'm going to second it, so.

MS. BAIRD: That was kind of strange

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

to me. I've never seen if people are talking that we can just --

MR. CHAPMAN: Call to question is to end debate, yeah. It's parliamentary procedure.

MS. BAIRD: Okay. Is that how we do it, then?

MR. CHAPMAN: If we need to. But I mean, I think -- yeah, I think Harriet's point is, I'm not sure further discussion is changing people's minds.

MS. BAIRD: Okay. So then we're going to move on to motion. Okay.

MS. SWAFFAR: Point of order. There was not a second, officially.

MS. BAIRD: I'm sorry.

MR. CHAPMAN: Yeah, we'll go back to the primary motion without a second. Then we'll just vote on the subcommittee. Yes.

CHAIR BEHAR: So Sue should read it and we're ready to go? So read the motion.

MS. BAIRD: Motion to remove DL-methionine, DL-methionine-hydroxy analog, and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

DL-methionine-hydroxy analog calcium CAS #59-51-8, #583-91-5, #4857-44-7, and #922-50-9 from 205.603 of the National List, based on OFPA and 7 C.F.R. 205.600(b). Call to vote.

CHAIR BEHAR: We start the vote with Tom.

MR. CHAPMAN: No.

MS. de LIMA: No.

DR. SEITZ: No.

MR. MORTENSEN: Abstain.

DR. BRADMAN: No.

VICE CHAIR ELA: No.

MR. RICE: No.

MS. OAKLEY: No.

MR. BUIE: No.

MS. BAIRD: No.

MR. GREENWOOD: No.

MS. SWAFFAR: No.

CHAIR BEHAR: Chair votes no.

MR. RICE: That was 12 no, 1 abstention, 1 absent, the motion fails.

MS. BAIRD: Our next material is trace

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

minerals. Devon?

MR. PATTILLO: At Section 205.603(d), the listing is trace minerals used for enrichment or fortification when FDA approved.

MS. BAIRD: This is Scott's.

MR. RICE: Thanks. Minerals are required in animal nutrition for their vital roles in various metabolic, enzymatic, and biochemical reactions in the animal body. They may be provided through the intake of plant matter and feed stuffs, or through synthetic supplements.

When diet is insufficient to meet an animal's nutrient requirements, supplementation of minerals is typically done through the inclusion in the diet, either as an individual substance, or as part of a trace mineral premix.

In terms of manufacturer, this is a broad categorical listing. The manufacturer varies. In our 2019 TR, technical review from this -- earlier this year, descriptions of the common processes used to manufacture many of the trace minerals are detailed in that.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Based on information presented in that TR, the hazards associated with the use of trace minerals are primarily associated with dust irritation of the skin and eyes.

We've received comments during the -- both review cycles from wide representation of the organic community supporting the continued use of this material, these materials, noting their essentiality of livestock health and welfare and their importance in offsetting seasonal variables in forage nutrition.

We did have some commenters noting that organic production should not be dependent on synthetic nutrients and that the current annotation is not restrictive enough to prevent reliance on them. These same commenters recommended adding an annotation, when foraged and available natural feeds are of poor quality.

According to the 2019 TR forages alone do not satisfy the minimal requirements of grazing cattle. And there is wide documentation of the need for these moving forward. Otherwise,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

comments were, again, in support of relisting this.

Thank you.

MS. BAIRD: All right. Any comments?
Discussion? Cool. All right.

So the motion has been made to remove
trace minerals from 205.603 of National List based
on the following criteria OFPA and 205.600(b).
Call to vote.

CHAIR BEHAR: We start with Lisa.

MS. de LIMA: No.

DR. SEITZ: No.

MR. MORTENSEN: No.

DR. BRADMAN: No.

VICE CHAIR ELA: No.

MR. RICE: No.

MS. OAKLEY: No.

MR. BUIE: No.

MS. BAIRD: No.

MR. GREENWOOD: No.

MS. SWAFFAR: No.

MR. CHAPMAN: No.

MR. CHAPMAN: Chair votes no.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. RICE: That was 13 no, 1 absent, the motion fails.

MS. BAIRD: The next material is vitamins. Devon?

MR. PATTILLO: At section 205.603(d), this listing is vitamins used for enrichment or fortification when FDA approved.

MS. BAIRD: All right. And this is mine.

The necessity for vitamins in livestock feeds are addressed in -- they're so important they're addressed in three different sections of the livestock regulation. 205.236(a)(2)(I) says that all agricultural materials must be agriculture except that synthetic substance allowed under 205.603, and nonsynthetic substance not prohibited under 205.604 may be used as feed active and feed supplements except that -- okay.

And then 237, livestock feeds, says the producer of an organic livestock operation must provide livestock with the total feed ration composed of agricultural products, including

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

pasture and foraged, that are organically produced and handled in operations certified to the NOP.

And 238, livestock health care practices says the producer must establish and maintain preventative livestock healthcare practices, including the provision of a feed ration sufficient to meet nutritional requirements including vitamins, minerals, proteins, and/or amino acids, fatty acids, energy sources, and fibers for ruminants.

So it has been dictated that the livestock operation must provide the nutritional needs of the livestock, including vitamins.

We heard -- there are 15 essential amino acids currently allowed for use in organic livestock production for fortification enrichment of the livestock feeds. With the scope of vitamin compounds being defined as required nutrients by the NRC, which is the National Resource Council nutrient requirements for cattle, sheep, swine, and poultry.

Dietary intake of these essential

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

vitamins are essential for the health and wellbeing of the animal, including livestock, including people.

Most vitamins aid in metabolism of protein, carbohydrates and fats, while some vitamin compounds have important antioxidant properties.

Common signs of vitamin deficiency include anorexia, poor growth, reduced feed efficiency, and in some cases, fatality.

No studies have been found indicating any kind of a toxic effect of vitamins in soil dwelling organisms, but it is noted that there are some during the process of making a vitamin that in this extraction process of vitamin compounds, that it might actually -- the acids and bases that are used could have some kind of ecological impairment if they were dumped in the soil. It was just kind of an aside.

There was a TR conducted in 2015 that stated that individual vitamin compounds are normally produced on an individual -- on an industrial scale by chemical synthesis or partial

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

synthesis, but state there's increasing number of fermentation processes being developed for vitamin production.

And many recently developed fermentation methods for manufacturing vitamins utilized GMOs. And that was kind of an eye opener.

We had been using vitamins for the beginning of organic production. There was a lot of discussion at that time knowing that vitamins are from a very limited source, with most of those sources being located in China and Indonesia.

According to this -- in response to this TR, NOP disbursed the guidance 5030 guidance evaluating allowed ingredients and sources of vitamins and minerals for organic livestock feed, which instructed certifiers to be diligent when reviewing their vitamins for presence of excluded methods. And OMRI, at that same time, issued a decision tree for determining.

In the guidance 5030, NOP specifically stated that vitamins and minerals identified as approved by FDA -- I'm not even going to read all

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

those different citations -- are listed in the current edition of AAFCO, because that's where you go to find approved FDA vitamins, including metal amino acid chelates, metal amino acid complexes, and metal whatever that amino acid that is, that is tied to complexes that are permitted, with the following limitations. And this was the limitation they gave on that.

Proteinated metal sources, metal proteinates containing protein sources from slaughter byproducts or produced by excluded methods are not permitted when fed to poultry in minor.

So there was no must on it that said that vitamins had to be reviewed for GE presence.

They -- but there was must that minerals had to be reviewed.

Accordingly, we've heard that -- from comments that the ACA has developed a working document and guidance stating that we're not -- based on NOP directive that we're not reviewing for vitamins using GEs and that is -- there's no

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

other source of vitamins, guys. So we want to acknowledge that out there and just we're not making comments. So comments, guys?

(Off-microphone comments.)

MS. BAIRD: Yes. Thank you, Harriet.

I needed a comment.

CHAIR BEHAR: Well, I think we'll just move forward on this with the knowledge that if there are no other non-GMO vaccine -- I mean --

MS. BAIRD: Yeah.

CHAIR BEHAR: -- vitamins out there -- both begin with the word -- the letter V -- that that's what we are approving just so the, you know, the organic community knows that we're aware --

MS. BAIRD: And we know.

CHAIR BEHAR: -- and we're still voting to keep it listed.

MS. BAIRD: And I appreciate that. Keep in mind we are mandated in three different sections of this livestock regulation that we have to meet the nutritional value, including use of vitamins. Any other comments? There you go. How

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

about that? I figured there would be a lot of comments.

Motion to remove vitamins from 205.603(d)(3) based on the following criteria OFPA and 7 C.F.R. 205.600(b). Call to vote.

CHAIR BEHAR: We'll start with Dan.

DR. SEITZ: No.

MR. MORTENSEN: No.

DR. BRADMAN: No.

VICE CHAIR ELA: No.

MR. RICE: No.

MS. OAKLEY: No.

MR. BUIE: No.

MS. BAIRD: No.

MR. GREENWOOD: No.

MS. SWAFFAR: No.

MR. CHAPMAN: No, ma'am.

MS. de LIMA: No.

CHAIR BEHAR: Chair votes no.

MR. RICE: That's 13 no, 1 absent, the motion fails.

CHAIR BEHAR: As a time check, it is

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

4:00.

MS. BAIRD: So are you wanting to move forward or are you just saying we --

CHAIR BEHAR: No.

MS. BAIRD: -- go -- okay.

CHAIR BEHAR: No, we want to move forward.

MS. BAIRD: Okay. The next item on our Livestock agenda is the discussion document annotating fenbendazole for -- to include laying hens and replacement chickens. That is -- who -- Ashley. Thank you, Ashley.

MS. SWAFFAR: Last thing. Okay. So we received a petition to revise the annotation for fenbendazole to expand the use to poultry and the annotation would include laying hens and replacement chickens intended to become laying hens.

We decided to do a discussion document this time to kind of get an idea of where everybody was, and we did not request a TR, but we did receive a lot of public comment that they would like for

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

us to get a poultry specific TR. And we talked about it in subcommittee prior to this meeting that we would more than likely be moving forward with a limited scope TR, so that's kind of where we are.

And let's see So just want to point out same thing as we talked about earlier with fenbendazole, this would be for use only in emergency situation.

In the document, I tried to put a few examples of how they would determine what an emergency is. And the other part of this is there's quite a controversy in the public comments about the no-withholding time of fenbendazole.

As the lead on this, I didn't feel that we had any justification to put a withholding time on fenbendazole because the FDA does not require withdrawal time for fenbendazole. And typically in the past what we have done is we've doubled any withholding time, so that's -- like the FERET that I brought up on moxidectin, we doubled it, in some cases a little more than double. And when you double zero, it's still zero. So that was my

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

rationale for that.

I know there has been questions about the efficacy of that concentration level in the residue and that is the main focus that we're going to do on that TR, so it's around the residue level, so. Any questions?

MS. BAIRD: Harriet, and then Scott, and then Asa.

(Simultaneous speaking.)

CHAIR BEHAR: I just wanted to also just encourage the public to provide us continued information on this material so we'll be able to bring a proposal forward for the spring and, you know, the five new members will be voting on it.

But probably many of us who are still here will work on it until January.

MS. BAIRD: And I said Scott, but I think it was actually Steve.

VICE CHAIR ELA: I guess, Ashley, in the public comment, I mean, it was, yeah, two times zero is zero as far as withdrawal period, but I'm not sure that's entirely fair. I mean, there was

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

public comment that there are residues present, they're just below FDA levels.

So I'm not sure that -- I guess I would prefer to see a very short withdrawal time just -- I think the public probably expects that we don't have residues present, and given that we tend to double the safety period, if there's residue present, you know, even if it's just right at the FDA approved level, I think there could be some rationale for a very short withdrawal time based on that.

MS. BAIRD: Asa was next.

DR. BRADMAN: I have kind of a related comment. You know, since we're at the discussion document stage, I know I would like to see perhaps more information maybe summarized in a tabular format of residue data. There was one study I think that CROPP/Valley submitted with their comments and then there's some information that's cited in the document.

I know there's reference also to the FDA threshold and, you know, it being at a safe

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

level. I know from experience that we have, for example, food tolerances from EPA for pesticides.

You know, all pesticide use in this country is safe, based on their risk assessment process, although I personally have concerns about some of the residues that are allowed.

Similarly, I would be concerned about any residue from a synthetic biocide used in an animal. I think in the CROPP/Valley data, you know, there was nothing detected in their study.

But I'd just like to see more of that and look at the detection limits and really decide if the studies were good, and perhaps I can help with that a little bit.

So and that might inform decisions about whether any withholding period is appropriate or necessary or not.

MS. BAIRD: Ashley is going to respond to that, and then Emily. Emily first? Okay.

MS. OAKLEY: Sure. I was just going to comment that the veterinarian, Blayne Mozisek, who spoke to us said that there was a six-day period

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

to show no detectable levels. Is that something that could factor into this discussion?

DR. BRADMAN: And do we have that study?

CHAIR BEHAR: Just as a point of information, and they are given fenbendazole for five days. So if -- it'd be five days plus six.

MS. BAIRD: Okay. Ashley?

MS. SWAFFAR: Yeah. That information wasn't included in the TR, he said. That was a study out of Denmark.

You know, I just want to say about the, you know, I know there's a lot of concern about that residue and whether you believe or don't believe that the FDA is ethical in their determination of that residue testing, you know, I think that's where the TR is going to come into play on that. And I think before anybody jumps to any conclusion that it should be five, six or whatever day, we need to wait till we see that TR come back.

And I -- since I won't be on the Board,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

I just want to caution everyone moving forward that, you know, we need to not just have arbitrary numbers thrown out there because it makes us feel better on a withholding time. And that's where you saw the fenbendazole on the dairy. I think that was kind of bringing that back into line because we lessened the withholding time on that because it was pretty much just a random number. And that's why it is now 48 hours on milk -- yeah, on milk so -- because it's double what they said.

And -- yep. On the detectable level, what I would like to see out of that TR, because you guys bring up that no detectable level and comparing that to milk. Is milk at 48 hours? Is that a no detectable level? Because we should hold all species the same accountability not just, you know, doing this.

And I want to go back and talk on my own personal part of it because I will only have three minutes the next time I talk about this, is this is a critical need for laying flocks. We have a real problem with birds that are truly outdoor

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

and on pasture and even on the pasture flocks that I work with that rotationally graze throughout their pasture because it's not just the outdoor area. It's chicken houses that have dirt floors.

Dirt floor chicken houses are the absolute worst for worm infestation. So you know, even if you're doing everything outside right, you're rotating every 14 days, 21 days, 30 days, whatever the different protocols are, you know, the inside of the house is where the problem is. You'll never get rid of them.

You know, and the conventional side, I mean, people are seeing these in cages. So it's not even just like access to the soil. They're having, you know, flies bring it in and things like that. So it's a real issue that is affecting the poultry industry and, you know, I know it was probably pretty gross to see those photos that that vet put up there, but I could go out to any flock just about and post-birds -- That's what we call an autopsy -- and look into the intestine track and see worms like that.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

And that's completely, you know, absorbing the chickens' food that they should be absorbing in their body. Those worms get it. So I just want to say it's critical for them.

We have done over the, you know, 10 years that I've been working with birds outside and on pasture, we've done diatomaceous earth as an alternative and see really not great results.

It can knock the levels down, but it sure doesn't get rid of worm infestations. And you know, we have to add it to high -- to the diet at such high amounts that the diet becomes nutritionally inadequate, and so there's some real challenges when using that. And yeah. That's my comment.

MS. BAIRD: Okay. Rick, and then Dave, and then Asa, and then Steve.

MR. GREENWOOD: Okay. I had mentioned, I think it was yesterday, about whether or not the residue survives cooking, because eggs are eaten as a cooked product at basically very high temperatures. They're fried or sauteed or something, but they're high temperatures. So the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

whole issue of residue may be moot. And I'd like to see when we get a TR or maybe Merck can survive -- provide information to see if it's what we're talking about is even necessary.

It's not like milk that's consumed while it's fresh even though it's been pasteurized for a short period of time. So I think that's something else we need to look at as a group for a TR.

MS. BAIRD: I just said, yeah, heat degrades, so that's a good point. I forget to get on -- okay. Dave.

MR. MORTENSEN: Yeah. I would just say, gosh, we're -- if we're going to have a TR done, this is the time to get the data. I'm sure they can provide it on residues. And I think we should ask for that data.

I think also given the breadth of conditions under which the birds are raised, not to keep picking up on the having, you know, zero is zero, it's really a likelihood of some concentration that remains in the bird over time,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

and it -- pesticides are being used here and we should be able to assure folks that are buying organic eggs that there are, you know, really low levels of the residue of that pesticide, which is a synthetic organic pesticide.

MS. BAIRD: Thank you. Asa, and then Steve is on -- I'm not sure where he's at at this point. I lost my baseball terminology.

DR. BRADMAN: I just want to clarify one thing because you used the word ethical with respect to FDA. And I have no doubt that what they did was ethical. What I'd be more concerned is just I want to understand the methods, and different methods, different approaches may come to different conclusions, but not an issue of ethics.

MS. BAIRD: Steve?

VICE CHAIR ELA: I guess, Ashley, I mean as you're describing this, and you just said dirt floors are the worst, or whatever, not quote you exactly, although it hits me, isn't good management then not to use dirt floors? I mean, I'm not a livestock person. I don't know the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

systems, but when I hear something like that, it seems like if you're going to do good preventative measures to avoid this, then that would be one of the expected preventative measures.

MS. SWAFFAR: Yes. So -- I mean, yeah, we prefer concrete. Going forward, all new builds, we require concrete. But the great thing about my area is we have a huge poultry industry that has left these farmers -- well, it's not a great thing, but it is when you're growing.

We have a poultry industry that's told these farmers thanks but no thanks anymore. So there's empty chicken houses that are older from the '80s that are sitting empty that we're going into. And they didn't do concrete floors back then. So you're getting older houses that people are remodeling to put into layers, and that's happening all over the country.

It's cost prohibitive for them to put concrete in. You're talking about 16,000 square-foot of concrete for the majority -- most houses are about that size and it's several inches

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

thick.

And so if you're going in with a pastured flock of, you know, smaller size and a larger barn, I mean, it's cost prohibitive for them to do that.

And the other point I wanted to say, don't expect this to come out in the spring. This will be a fall issue because we are -- we won't get the TR back in time to have this as a proposal in the spring.

MS. BAIRD: Yeah, we did vote, I think, at the last subcommittee that we would have a TR. It's not just -- that was decided that we would. No?

MS. SWAFFAR: No, we decided we would wait to talk about it.

MS. BAIRD: Oh. Okay. I thought --

CHAIR BEHAR: Well, we said that we wanted a TR but we would wait after this to give the targeted questions to the Program.

MS. BAIRD: Okay. Thank you.

CHAIR BEHAR: So the Program hasn't

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

started working on it yet, but they're aware that we want one.

MS. BAIRD: Okay. Thank you. Any other discussion? Yes.

CHAIR BEHAR: I don't think I've said anything about this yet.

So I agree about the pesticide, the fenbendazole residue in there, and also one of the questions would be, you know, human health.

In the very limited research that I did, it -- fenbendazole is sometimes used in human health as well. And it is some parasiticide that can develop resistance, and so I don't know if that's an issue with human health, if people have been getting low levels of it, if it would then affect its efficacy in a health product in the future because they would have had -- I don't know. I don't know. But that's one of the questions I would like to put --

MS. BAIRD: So all the papers that you sent, most of them in third world countries, but I'm sure that somewhere in the United States there

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

are people who also may have worms. I don't know.

CHAIR BEHAR: It's actually being used as a cancer, yeah, showing the --

MS. BAIRD: Oh, thanks. Well, I saw that they were using it as a parasiticide for people in third world countries that they're actually using it as a medicine, which within itself, to me, meant that it was not toxic to humans if we're actually prescribing it. But that was my take on that paper.

We are done with Livestock, guys. thank you very much. Yay. Oh, oh. Asa.

DR. BRADMAN: One comment to end the livestock conversation before -- we've actually had an answer to a question that Dave kind of posed about indirectly which came first, the chicken or the egg. And somebody actually answered that question today, and I'll just leave it at that.

(Laughter.)

MS. BAIRD: Please clarify that answer because I didn't catch that one.

DR. BRADMAN: You actually answered

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

it.

MS. BAIRD: I did?

DR. BRADMAN: You did.

MS. BAIRD: How did I answer, guys?
I'm not with it.

DR. BRADMAN: Well, which comes first,
the chicken or the egg?

MR. CHAPMAN: The dinosaur.

MS. BAIRD: The dinosaur.

DR. BRADMAN: So the egg must come
first.

(Laughter.)

MS. BAIRD: Okay. Thank you. I
didn't --

DR. BRADMAN: It came from a dinosaur.

MS. BAIRD: Oh, all right. Chickens
are dinosaurs. I love that. It is true.

CHAIR BEHAR: Okay. So we're going to
end the Livestock Subcommittee and we're just going
to take a very, very, very short break, come back
to Scott and Certification. And I know I'm going
to talk to Dan and Dave because they have flights,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

so we're going to try to also fit in officer elections. So it is right now 4:19. Be back at 4:25.

(Whereupon, the above-entitled matter went off the record at 4:19 p.m. and resumed at 4:27 p.m.)

CHAIR BEHAR: Okay. We are going to get started. So next up is the Compliance, Accreditation, and Certification Subcommittee, affectionately known as CACS, and Scott is the chair. It's all up to you, Scott.

MR. RICE: Thank you, Harriet. I won't take too much time here.

Even though the CACS did not come forward with any discussion documents this meeting, we did have plenty of substantive conversations, namely around the continuing efforts in the industry and at the Program around fraud and integrity of the supply chain with some eager anticipation for the strengthening organic enforcement rule as we heard from Jenny on Wednesday. We should be seeing that by end of year,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

which we're excited about.

And as I've said before, I imagine there will be quite a bit that the CACS finds relevant to their work. And my thoughts are that we kind of take a look at what is included in there and if there are things that we can sensibly approach even before, I guess, that rule is finalized that makes sense, that would be good and, indeed, look at the things that that rule does not address and certainly take a look at those, in terms of any aspects of the industry that are not -- that just aren't addressed to where we think it might best be served.

And one of that -- one of those areas that has come up repeatedly is the fresh produce trade. We've heard from a number of commenters and through public testimony some of the unique challenges there. So I imagine that would be something that we would look at as well.

And also, just briefly, again, just to reiterate, we have heard of the concerns around energy infrastructure. That's not fallen on deaf

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

ears, and as I noted at some point during public comment in the last couple days, look to approach that in other platforms, namely through ACA and expect to have some discussions with folks at the upcoming Accredited Certifiers Association training that we have annually in conjunction with NOP coming up in end of January I believe.

So that is really in brief what I wanted to touch base on, so I'll leave it at that.

VICE CHAIR ELA: Scott, I just have to say in the terms of enforcement and accreditation, we were unloading a truck this year to put some of our stuff on, and there was a box of vegetables that had the statement, certified organically grown by organic certifiers.

(Laughter.)

MR. RICE: We like to keep it straight and simple.

VICE CHAIR ELA: I was like --

CHAIR BEHAR: There actually is an organic certification agency located in California. Ventura, I think.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

MR. RICE: Yeah.

CHAIR BEHAR: And their name is Organic
Certifiers.

VICE CHAIR ELA: It was good, but it
was like.

MR. RICE: Stick with the obvious.

CHAIR BEHAR: You know when it says
certified organic by the National Organic Program
that it's not quite right.

Okay. With that, any other questions
or comments? Okay. So on to the next item of
business, which is NOSB officer elections. Our
process is, we will nominate. If there is more
than one person getting nominated, then we will
have a ballot, and I believe myself and maybe
Michelle will count them, or Devon.

MR. CHAPMAN: It's usually --

CHAIR BEHAR: Myself and someone else
since --

MR. CHAPMAN: It's usually one of the
other officers, whoever's not running.

CHAIR BEHAR: Yeah. Well, we'll see

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

how the --

MR. CHAPMAN: I can help because I'm not running for anything.

CHAIR BEHAR: But with that, I would like to enthusiastically nominate Steve Ela to be the chair. I got a second already from Jesse. Are there any other nominations?

Going once, going twice, looks like you're stuck with it, Steve.

(Applause.)

CHAIR BEHAR: Okay. We're going to go to nominations for vice chair. Sue?

MS. BAIRD: It's my honor to nominate Scott Rice as vice chair.

CHAIR BEHAR: Any other nominations? Oh, Dan has seconded and Rick will third.

MR. CHAPMAN: I'll fourth.

CHAIR BEHAR: Any other nominations out there? All you guys that don't want to step forward, it's really not that much work. Okay. Especially when Steve's going to shoulder all the burden.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(Laughter.)

CHAIR BEHAR: Okay. So let's say congratulations to Scott, our new vice chair.

(Applause.)

CHAIR BEHAR: The next position is secretary. You can see what Scott had done is tracking the voting and you also attend the executive subcommittee calls and the administrative call when we plan the executive call, so.

MR. CHAPMAN: And, now, track the open docket.

CHAIR BEHAR: Yes, and keep track of the docket. So --

DR. SEITZ: I'd like to nominate Jesse.

MR. BUIE: I've been secretary already.

DR. SEITZ: Oh, you --

CHAIR BEHAR: So you're highly qualified.

DR. SEITZ: Highly -- yeah.

(Laughter.)

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

DR. SEITZ: There's no term limit or -- no, there's no term limit, right?

CHAIR BEHAR: No.

DR. SEITZ: Yeah. So I'm nominating you for a second term.

CHAIR BEHAR: Jesse, will you accept?

MR. BUIE: Yes.

CHAIR BEHAR: Good. Then I'll second it. I will heartily second it.

(Laughter.)

CHAIR BEHAR: Any other nominations for secretary of the National Organic Standards Board for the upcoming year? We love you, Jesse.

(Applause.)

CHAIR BEHAR: I think Emily seconded that, right, Dan?

MS. OAKLEY: Yes, I did.

CHAIR BEHAR: Or whoever's keeping track of that.

Okay. So we now have a new Board. I don't know if they start right now or not. I guess I'll finish it, but I'll let Steve do that at the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

very end.

Next up is the work agenda. Michelle, are you ready? You are. Okay. I'm -- guess I'm going to read this. So upcoming for the spring meeting is strengthening organic enforcement follow up, probably a discussion document. We're just going to have to wait and see how quickly it comes out and how much work we can do on something.

Sodium carbonate lignin is a petition for crops, that'll be a vote. Paper pots, a petition for crops, so that'll be a vote. Liquid fish productions annotation for crops is a discussion document. Biodegradable -- biobased mulch, possibly changing the annotation is a discussion or may be a vote.

Soap-based algicide demossers is crops, a discussion. Ammonium carbonate -- now we're moving into sunsets. So soap-based algicide, demossers, ammonium carbonate soaps, insecticidal, vitamin D3 as a rodenticide, aquatic plant extracts, lignin sulfonate as a chelating agent suppressant, sodium silicate floating agent

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

and post-harvest handling, EPA List 4. That one's always fun, inters of minimal concern.

Arsenic and strychnine on 602, that's the sunsets for crops. Everything in the spring meeting is a discussion on sunsets and then we vote in the fall.

For handling, there will be a fish oil annotation change that we will look to go to vote, L-malic acid reclassification go to vote, ion exchange filtration in handling will be a discussion document. This is something the National Organic Program asked us to talk about and look at.

Low acyl gellan gum is a petition that'll go to vote. Red jalapeno pepper on 606 is going to go to vote as a petition. New petition material -- now we start the sunsets.

Kaolin, sodium bicarbonate, waxes, nonsynthetic, like, wood resin, ammonium bicarbonate only as a leavening agent, ammonium carbonate as a leavening agent, calcium phosphates, monobasic, dibasic, and tribasic, ozone, sodium

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

hydroxide prohibited for use in lye peeling of fruits and vegetables, inulin, oligofructose, enriched, kelp for use only as a thickener and dietary supplement, orange shallac, unbleached, corn starch native, sweet potato starch for bean thread production only. And now we're moving into 606s.

Turkish bay leaves, whey protein concentrate, carnauba wax, colors, and there's 18 of them, glycerin. That's handling, which usually has a lot of materials in the sunset.

Okay. Next will be a petition for a discussion again for the fenbendazole, and we might not have the TR back by then -- butorphanol. Starting sunsets now for livestock.

Flunixin, magnesium hydroxide, poloxalene, formic acid, excipients, EPA List 4, and then on the prohibited natural, strychnine.

And then Materials Subcommittee, Emily's going to do her best to have a marine materials proposal for a vote in -- and this is in crops only. And then there will be a panel on

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

assessing cleaning and sanitation materials used in organic crop, livestock, and handling. And that will just be a discussion.

So looks like an easy load, gang, especially since most of it I won't have to do. But I'm going to help with some.

Anyone have any questions or additions?

I think the subcommittee chairs did look that over.

I don't see anybody quaking in their boots, so you know, give some thought to which items you might want, so on the next subcommittee calls you're ready to help the chairs out with the assigning of those sunsets.

Okay. Since no more comments, what time are we at? 4:39.

Next up is the outgoing members, Ashley Swaffar, Tom Chapman, Lisa de Lima, and myself are going to get some pats on the back.

(Laughter.)

DR. TUCKER: Okay. So the first pat on the back goes to Harriet. And so we have here a certificate of appreciation presented to Harriet

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Behar for four years of dedicated service as a member of USDA's National Organic Standards Board 2016 to 2020.

And I just have to say Harriet's work, she invests her heart and soul in everything that she writes and produces for this Board. Your passion shines in everything you do, so thank you for all your work, so.

(Applause.)

DR. TUCKER: We'll also take official, sort of, closer up photos as a group afterwards. Okay?

CHAIR BEHAR: My only comment on this is when you serve less than five years, you could apply again, but I think my husband would kill me.

(Laughter.)

DR. TUCKER: Our second -- next certificate of appreciation is for Lisa de Lima, this time for five years of dedicated service as a member of USDA's National Organic Standards Board, so 2015 through 2020.

I have really enjoyed getting to know

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

Lisa. Lisa is always quiet, and yet every time she speaks, it is of tremendous value and really reflects the consumer's view, which is appropriate for the retailer's seat. And so you have represented your community beautifully.

Thank you for all your work.

(Applause.)

DR. TUCKER: And so now we have a certificate of appreciation presented to Tom Chapman also for five years of dedicated service as a member of USDA's National Organic Standards Board from 2015 to 2020.

I recently had the opportunity to visit Tom in his home space at Clif Bar, and I have appreciated your gentle counsel and wise words over the past couple of years. It is a true honor to work with you.

(Applause.)

DR. BRADMAN: Can I just add, Tom, if you run for Congress, I'll vote for you.

(Laughter.)

DR. TUCKER: And so here is a

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

certificate of appreciation for Ashley Swaffar, again for five years of dedicated service as a member of USDA's National Organic Standards Board, 2015 to 2020.

And Ashley, you bring the voice of the producers and the voice of pragmatism, and wait-make-sure-you're-paying-attention-to-this, and I love that both thoughtfulness and dedication.

So thank you for everything.

(Applause.)

VICE CHAIR ELA: I would just like to say as you guys were the leaders that -- for my group that came in, you know, we didn't know the previous group. Tom was chair. You really set a high bar and, you know, Harriet, thank you for all the long discussion documents that, you know, dove in and really took some things by the horns.

Ashley, I really appreciate -- I'm not a livestock person that -- it's always very educational for me to hear what you have to say in that industry.

Tom, your leadership and attention to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

detail and memory, it's a little daunting to know that you won't pop up with some detail from five Board meetings back from the notes that -- but it's impressive and it's been huge.

And Lisa, I just echo what Jenny said.

You're quiet, but when you say something and your knowledge in the retailer side, I -- you all are going to be very missed, so thank you.

As incoming chair, it's just hard shoes to fill. I know we will fill them, but we will miss you, so.

DR. SEITZ: And Tom, maybe you can produce for us the cliff notes.

(Laughter.)

MS. SWAFFAR: So I have the cliff notes. I did a little thing here, because I know Tom loves statistics about our term on the Board. We voted, during our five years, 503 times on this Board, and in our first term we voted 184 times our very first year.

So we lived through sunset '17 and the rest of the Board is yours, so you're welcome that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

we reorganized sunset and you will never have to go through that ever again.

(Applause.)

VICE CHAIR ELA: I know it's common for people to have a closing statement, if you so choose. So do any of you wish to make your last hurrah as you -- you didn't get to vote. You didn't get to do a final vote as we did election for officers, so we couldn't clap for you on that, but closing statements? Harriet.

CHAIR BEHAR: Probably not a surprise, but that you haven't seen the last of me. And Lynn Coody said I can't wait until you're off the Board so you can sit next to me again. So look for me out there in the audience.

VICE CHAIR ELA: Ashley?

MS. SWAFFAR: Yeah, so I just want to say thanks to a few folks. Thank you to Michelle for keeping us all in line. Your job is so hard to keep us all on time and everywhere we're supposed to be for subcommittee calls, so thank you so much to all of your dedication to our Board during our

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

time. So thank you, Michelle.

(Applause.)

MS. SWAFFAR: And I also want to say thank you so much to the public. Your comments really help us in what we do on this Board and kind of guide us in the route that we take.

I know that I couldn't have done my job without the public submitting their comments and, you know, learning all the other processes, because I know quite a little bit about chickens, but sure didn't know a lot about all the different gums over the years that we've talked about -- and seaweeds.

So you know, I just want to say thank you. You guys don't always get recognized, but your comments are very valued. So thank you.

MR. CHAPMAN: I don't have many final words to say, other than -- I mean, this is honest.

People know this, as I've been -- the last two years, that I'm not going to miss the Board or the work. But what I am going to miss, and this comes from my heart, is the people. I mean, the Board members, the Program, and the members of the public,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

it's incredible the amount of passion and work that people put into the organic movement, and I just feel blessed that I'm able to do this and go home every night and sleep soundly knowing that, you know, my life has purpose and I'm making a positive impact on the world. So thank you, everybody.

(Applause.)

MS. de LIMA: Yeah, just to echo what Tom said, especially grateful to all of you on the Board and the Program that even though we don't all agree or have the same perspective that I feel like these last few years we've really been able to, you know, sit down, have dinner together, hang out, have drinks, you know, talk NOSB into -- late into the night and really be able to listen to each other and not have that -- you know, it could have gone very differently and I'm really happy about how this Board gelled and came together after the first few years. So thank you to all of you.

(Applause.)

VICE CHAIR ELA: And I'd like to thank the rest of the Board. I'm not really sure I'm

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

ready for this position or have time for it, so it's somewhat with trepidation. But everybody else, as well, has put a lot of time into this, and I want to echo what Lisa said.

I know we had at least one very divisive vote that could have really fractured the Board, and it's been nice that that, you know, I think we respect each other and, you know, it's okay to have diverse opinions. It's okay to abstain. It's okay to do all these things, and I look forward to a Board that continues to voice their own opinions and have strong thoughts, but also at the end of the day goes out and enjoys each other's company.

So thank you to all the Board members for the time you put in. And we have five new Board members coming in at some point, and that then means just as when five of us came in for you all, you know, that's -- it's going to be a new world. But I think we can train them and, you know, bring them along and hopefully instill a very good culture in them. So thank you to the rest of the Board.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

DR. TUCKER: As the Designated Federal Officer, I would like to thank everyone for being here. Let's give a big round for everyone who's still here, first of all.

(Applause.)

DR. TUCKER: The last three days have been democracy at work. Thank you for being a part of it and safe travels home.

CHAIR BEHAR: And so with that, Steven and I, we'll do it together, adjourn.

(Whereupon, the above-entitled matter went off the record at 4:52 p.m.)

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

NEAL R. GROSS
COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com