UNITED STATES OF AMERICA
DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
NATIONAL ORGANIC PROGRAM

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NATIONAL ORGANIC STANDARDS BOARD

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PUBLIC COMMENT WEBINAR

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TUESDAY
APRIL 19, 2022

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The Board met via Videoconference, at 12:00 p.m. EDT, Nate Powell-Palm, Chair, presiding.

MEMBERS PRESENT

NATHAN POWELL-PALM, Chair
AMY BRUCH
BRIAN CALDWELL
GERARD D'AMORE
CAROLYN DIMITRI
LIZ GRAZNAK
RICK GREENWOOD
KIMBERLY HUSEMAN
MINDEE JEFFERY, Vice Chair
ALLISON JOHNSON
DILIP NANDWANI
LOGAN PETREY
KYLA SMITH, Secretary
WOOD TURNER
JAVIER ZAMORA

ALSO PRESENT

MICHELLE ARSENAULT, Advisory Committee
Specialist, National Organic Program
JARED CLARK, National List Manager, National
Organic Program
DAVID GLASGOW, Associate Deputy
Administrator, National Organic Program
ERIN HEALY, Division Director, Standards,
National Organic Program
ANDREA HOLM, Materials Specialist, National
Organic Program
DEVON PATTILLO, Acting Assistant Director,
Standards, National Organic Program
JENNIFER TUCKER, Deputy Administrator, National
Organic Program; Designated Federal Officer

1 P-R-O-C-E-E-D-I-N-G-S 2 (12:04 p.m.)3 MS. ARSENAULT: So welcome everybody for joining us for the National Organic Standards 4 Board oral comment webinars, today and Thursday. 5 6 It's the beginning of the NOSB meeting which will continue on into next week. I'm going to go read 7 through some administrative stuff, so if you're 8 on the phone with us, we do have a slide on the 9 screen and I'll just verbally tell you what you're 10 11 not seeing on the screen. 12 If you're having online issues, audio issues, you can always dial in on the phone. 13 numbers are on the screen in the chat box, if you're 14 with us that way. They also appear on the NOSB 15 meeting webpage where you can find them there. 16 We ask that you do please stay on mute. 17 18 is enabled, so you guys can talk with each other If you look at the -- you find your Zoom 19 via chat. taskbar, it's in the center of the task bar. You 20 can chat with each other, but chats are not part 2.1

And if you're a public

2 commenter, you have to sign up in order to be called 3 on to speak today. We have closed captioning enabled, and 4 you can also find that in your Zoom taskbar, a 5 6 little to the right, you can turn it on or off for yourself, so you can see it if you want, and turn 7 it off if you don't want to see it. You can also 8 9 change the font size, if you need it bigger. Please don't use the raise hand feature. 10 11 commenters registered in advance and Nate, the 12 board chair, will be calling on people in turn. You can customize your Zoom view. 13 So 14 what you can see on the screen and the upper right 15 hand side of your Zoom window you'll see nine boxes, kind of little Brady bunch thing. You can change 16 17 what you see on your screen. We are going to pin 18 my camera, so which will be pointed at the speaker 19 timer. So that should always appear for 20 everybody, no matter how you rearrange your view. If you're having technical problems, 21

of the public record.

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1 you can always contact Zoom support.zoom.us, in 2 the upper right hand. They have a contact us 3 And Andrea just chatted that web address into the chat there. We are recording and have 4 transcriptionists on the line with us today, and 5 6 we're going to post the transcripts on the NOP soon as they're available. 7 website as It's usually a couple of weeks after the conclusion of 8 9 the board meeting. Next slide, please, Jared. So for speakers, make sure that your 10 11 name is displayed in your video tile correctly so 12 we can find you when it's time for you to speak, just to make sure you're on the call with us. 13 we can unmute you if you're having trouble unmuting 14 yourself. You should have access to both your mic 15 and camera and be able to control those yourself. 16 But we do ask that people please stay on mute just 17 to keep the background noise down. 18 19 When you're called on, we're going to 20 -- you can unmute yourself and then turn your camera If you want, it's optional, you don't have 2.1 on.

The mic is on the bottom left 1 to be on camera. of the Zoom taskbar. And if you're on the phone 2 3 only, you may have to hit, and you don't have a mute button on your phone, you may have to hit star 4 5 6 in order to mute and unmute yourself, it toggles. When you come to the mic, you're going 6 7 to state your name and affiliation for the record at the start of the comment, and then I'll start 8 9 the timer. And each commenter has 3 minutes to We'll use the timer and we're going to test 10 speak. 11 it during the intro here, just so you guys can hear 12 what it sounds like. It also will -- there's a timer on screen, so I'm going to flip over to my 13 So you should be able to see 14 other camera here. that right now it's showing 5 seconds, and it's 15 backwards for me, so hopefully it's right for you 16 So, after your comment is done, either the 17 18 timer's going to go off and tell you you're done, 19 please finish your sentence. And then Nate will open it up to the board members to ask you 20 So you might not go on mute immediately 2.1 questions.

1 after you're done with your comments.

All right, I think I am done with 2 administrative stuff, and I'm going to turn the 3 mic now over to Jenny Tucker, the National Organic 4 Program, Deputy Administrator. Jenny, welcome. 5 6 MS. TUCKER: All right. Thank you, 7 Michelle. And welcome everyone. I'm Jennifer Deputy Administrator of National 8 Tucker, the Organic Program. Welcome first all 9 to National Organic Standards Board members. 10 This 11 is our fourth online meeting together, and we are 12 happy to continue to have such an engaged audience I would particularly like to 13 for this forum. welcome our four new board members. We have Liz 14 15 Graznak from Missouri, we have Allison Johnson from California, Dr. Dilip Nandwani from Tennessee, and 16 Javier Zamora from California. They started their 17 18 work on the board this spring. We're going to give 19 them a round of Zoom applause like this, which is 20 waving your hands in front of the camera to applaud. So welcome to all of our new and our returning 2.1

1 board members.

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For all our public commenters, thank you again for engaging in this process with us.

I also thank our audience who are here to bear witness to this public meeting process. We are glad that you are here. This webinar opens a series of virtual webinars that will occur over multiple days, 2 days this week, and 3 days next week, meeting access information for all meeting segments is posted on the NOSB meeting page on the USDA website. Transcripts for all segments will be posted once completed.

This meeting, like other meetings of the National Organic Standards Board, will be run based on the Federal Advisory Committee Act and the Board's Policy and Procedures Manual. I will act as the Designated Federal Officer for all meeting segments. Nate Powell-Palm, our new board chair will take the helm for this session. Before we start, let's give Nate a round of applause in meeting. advance for a great And Nate,

2 MR. POWELL-PALM: Okay. 3 MS. TUCKER: As I noted at the start of the last NOSB meeting, in an open transparent 4 process, mutual respect is critical. 5 We do ask 6 you in advance to avoid personal attacks 7 disparagement, please engage with grace. To close, I thank the National Organic Program team. 8 9 This is an amazing team that I am honored and 10 privileged to work with every single 11 Michelle keeps this world spinning for us. We also 12 have Jared Clark, Devon Pattillo, Andrea Holm, Dave Glasgow, and our Standards Director, Erin Healy. 13 So big round of applause to both program staff 14 15 the board and participants and So thank you all of you. 16 commenters. I am now 17 going to hand the mic back for a roll call of NOSB 18 members and NOP staff. And Michelle, I believe I'm handing it back to you. 19 Is that correct? 20 MS. ARSENAULT: Off the speaker timer Nate Powell-Palm? 2.1 there.

congratulations on your board chairmanship.

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1	CHAIR POWELL-PALM: Present. And
2	good morning from Montana.
3	MS. ARSENAULT: Good morning.
4	Mindee? I can't see everybody now. So I'll
5	listen to your
6	MEMBER JEFFERY: Present. Thank you.
7	MS. ARSENAULT: Hi, Mindee. Kyla
8	Smith?
9	MEMBER SMITH: I'm here. Good
10	morning.
11	MS. ARSENAULT: Good morning, Kyla.
12	MS. SMITH: Afternoon, I guess it is
13	now outside.
14	MS. ARSENAULT: Good day, good day.
15	That works. Amy Brooke?
16	MEMBER BRUCH: Good morning,
17	everybody.
18	MS. ARSENAULT: Brian Caldwell?
19	MEMBER CALDWELL: Here.
20	MS. ARSENAULT: Hi, Brian. Jerry
21	D'Amore?

1	MEMBER D'AMORE: Here as well.
2	MS. ARSENAULT: I'm going to call
3	Carolyn Dimitri, but I think Carolyn's going to
4	be a little delayed joining us. Great. Liz
5	Graznak?
6	MEMBER GRAZNAK: Present. Good
7	morning from mid-Missouri.
8	MS. ARSENAULT: Welcome, Liz. Rick
9	Greenwood?
10	MEMBER GREENWOOD: Present.
11	MS. ARSENAULT: Okay. Kim Huseman?
12	MEMBER HUSEMAN: Hello. Good
13	morning.
14	MS. ARSENAULT: Allison Johnson?
15	MEMBER JOHNSON: Present. Good
16	morning. Clunky technology.
17	MS. ARSENAULT: Help is in the room.
18	We understand. Dilip Nandwani?
19	MEMBER NANDWANI: Good morning from
20	Tennessee. Thank you.
21	MS. ARSENAULT: Good morning, Dilip.

1	Logan Petrey?
2	MEMBER PETREY: Hi. Present. Thank
3	you.
4	MS. ARSENAULT: Welcome Logan twice.
5	Wood Turner?
6	MEMBER TURNER: I'm here. Good
7	morning.
8	MS. ARSENAULT: Hello. Good morning,
9	Wood. And Javier Zamora?
10	MEMBER ZAMORA: Buenos dias a todos
11	here from beautiful rainy Watsonville, California.
12	MS. ARSENAULT: Excellent. Thank
13	you. All right. So Nate, everyone is here.
14	Carolyn, I expect to be joining us shortly, so we
15	can I'll give her a shout out when she joins,
16	if you want. Right. And Jenny already introduced
17	NOP staff. So I'm going to hand the mic to you
18	now, Nate, to take over the rest of the meeting.
19	And at some point Nate will test the speaker timer
20	just so people can hear it and kind of know what
21	to listen for.

1 CHAIR POWELL-PALM: Sounds good. Τ 2 heard it was upgraded to be very pleasant. So 3 hello everybody, I'm Nate Powell-Palm, I am a farmer based in Montana, just outside at Bozeman, 4 and I am stoked to be here with you all today. 5 6 It's going to be a really great meeting, and I'm excited to hear from our community and have the 7 opportunity for our new members especially, to get 8 9 their feet wet with this process and learn how and why organics is so great, through this feedback 10 11 process.

When we get started off here, it's just a quick reminder that we actually do have a policy and procedures manual about public comments. So all speakers who will be recognized, signed up during the registration period, persons must give their names and affiliations for the record at the beginning of their public comment. Proxy speakers are not permitted. Individuals providing public comment shall refrain from making any personal attacks or remarks that might impugn the character

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of any individual. 1 Members of the public are asked to 2 3 define clearly and succinctly the issues they wish to present before the board. This will give the 4 NOSB members a comprehensive understanding of the 5 speaker's concerns. I'll call on speakers in the 6 order of the schedule and we'll announce the next 7 person or two so that they can be prepared. 8 Please 9 remember to state your name and your affiliation, and then we'll start the timer. Board members will 10 11 indicate to me if they have guestions, and I'll 12 call on them. Only NOSB members are allowed to 13 ask questions. So, let's get started. 14 All right. 15 Because our first member is going to be our first commenter, former member, is going to be Steve Ela. 16 And so real quick, Steve, before we get started, 17 18 Michelle, would you play the timer real quick, so 19 we can hear the chime of the end of a comment? 20 Thank you.

MS. ARSENAULT: Could you guys hear

1	that very well?
2	CHAIR POWELL-PALM: Kind of quiet, but
3	I think we'll get it.
4	MS. ARSENAULT: Right. All right.
5	The timer is on screen as well, so you'll be able
6	to see it counting down. Nate, I just want to add
7	one thing, I forgot to mention that if you have
8	a slide deck, we'll make sure it's up on screen
9	before you get started with your comment. We'll
10	get all settled first before I start the timer.
11	CHAIR POWELL-PALM: Yes. If any
12	commenters are going to be joining exclusively by
13	phone and you're not able to name yourself, please
14	send Michelle a message. If you're on, we're going
15	to be calling folks out. And if we don't see you,
16	we're going to skip over you, but we're going to
17	try to give you ample opportunity to make yourself
18	known. All right. If we're ready, the floor is
19	yours. Steve.
20	MR. ELA: Good morning, everybody.
21	I'm Steve Ela, organic fruit farmer in little town

of Hotchkiss in Western Colorado. Really organic
farmer, but I also am sometimes advisor of the
National Organic Coalition. So with that, I would
like to start my comments. Really I want to speak
on the highly soluble nitrogen issue, but before

I do that I want to address something with PDS.

I would like to propose a change to the policy and procedures manual that gives ex-NOSB members an extra 30 seconds in public comment for every year they served on the board. So I'll let you take that under consideration. And then with that, I'll jump into the highly soluble nutrient I'd like to welcome the new board members and say hi to all the old board members. new board members, I know there is a lot of time required, and some of it is dealing with some sets that seem really mundane, but I hope that in your 5 years of tenure you will have several topics that you feel like really make a difference to the organic community. And with that, I think the highly soluble nutrient, nitrogen proposal is one

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of those topics.

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standard will govern the nature of organic farming into the future. One of the big issues with it is to limit the number of highly soluble nutrients that are applied and honor the mantra of feeding the soil. Organic farming has been based on that and is not a nutrient substitution process. And by limiting the highly soluble nutrients that are applied through a practice standard that will help to honor that mantra of which OFA was originally designed.

One of the comments has been that this standard is not necessary at this time. However, as was evidenced by the Ammonia Extract petition, there are new and novel materials coming out. And so this is needed for the future to limit the number of highly soluble nutrients that can be used until they're able to be submitted by petition and prohibited, similar to the ammonium extract petition that we've just received last meeting.

The other comment was that this overburdens farmers with too much paperwork, and that'll be difficult for certifiers.

My response to that is that if you do not use materials that are less than three-to-one carbon and nitrogen ratio, all you have to do is check the box and say I don't use this, and you're done. There is no burden whatsoever if you use materials above that three-to-one ratio. use them below, then just like with sodium nitrate the past, it is easy to document in that, certifiers, nutrient manufacturers, material review organizations will all have incentive to list that three-to-one ratio, and so it should be fairly clear once, this system gets started.

And finally, I'm going to address the law of return and recycling. Organics is dedicated to recycling nutrients. However, that does not mean we have to recycle every nutrient. For example, we don't recycle bio solids or colored papers from newspaper. So we do recycle

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1	things, but it is really the whole product. And
2	just like when you eat dinner, you're looking for
3	wholesome foods and other things; you're not just
4	looking for a single vitamin to feed yourself.
5	So organic is dedicated to that soil, it is
6	dedicated to recycling of the whole nutrient, and
7	I'd be happy to answer any questions that you have
8	about this topic.
9	CHAIR POWELL-PALM: Excellent time.
10	Good precedent to set, right on the money.
11	Members, do we have any questions for Steve?
12	Logan?
13	MEMBER PETREY: Hi, Steve. You knew
14	I'd be asking a question.
15	MR. ELA: Of course.
16	MEMBER PETREY: I'll keep it simple.
17	Thank you for coming on. I appreciate it. Good
18	to see you. So you mentioned highly soluble
19	nutrients and not so much, or I mean, I know
20	we're talking about nitrogen here, but you did
21	reference nutrients a few times. And so, do you

1	think that this rule should expand to all nutrients
2	and not just nitrogen, including calcium, boron
3	and other highly soluble nutrients? Should we
4	start expanding onto that and putting limits on?
5	MR. ELA: You know, the nutrients
6	designation is a habit, really this pertains to
7	fertilizers as it should. That was from the
8	comments of last fall where people said we should
9	limit it. I don't think I'm going to go down that
10	path of all highly soluble nutrients. Just, I
11	mean, we already do with calcium fluoride and some
12	of the other nutrients. So there you know,
13	there is a precedent for that, but really this
14	motion is about highly soluble nitrogen
15	fertilizers and their impact on the soil. I think
16	some of the other nutrients are like calcium
17	fluoride tend to be more foliar nutrients, so it's
18	a bit of a different story. So I'll just stick
19	to the nitrogen side of it right now, just to keep
20	it more focused.

MEMBER PETREY:

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Thank

Okay. Fair.

1 you. 2 CHAIR POWELL-PALM: Amy? MEMBER BRUCH: 3 Sure. Hi, Steve. Good to see you again. Thank you so much for your 4 continued contributions to the organic community 5 6 and your previous board service. I really 7 appreciate your written comments and your current This is a really important topic. 8 oral comments. 9 You did bring in the fact of vitamins and just kind of how we can digest this principle for --10 11 I mean, maybe non-farmers, just the complexities 12 of what vitamins do to the body versus a complex So I wanted to give you a little bit of time 13 to kind of elaborate on just the solubility portion 14 15 of nitrogen versus the protein component 16 nitrogen. 17 Thanks, Amv. MR. ELA: Sure. I know 18 I've talked with a number of people that wonder 19 where the three-to-one ratio comes from, and really 20 that ratio is right at the break point between proteins and amino acids, and just more of a pure 21

nitrogen in the form of nitrate and ammonia. And the basis of organic agriculture has always been to feed the soil, and by feeding the soil protein or even amino acid, it means the soil biota have to break that down into -- to make the nitrogen available as a plant, available nutrient. And so that three-to-one carbon and nitrogen ratio really is a break where we feed the soil more complex nutrients and that soil and the biota has to respond with that complex nutrient. And that's always been a mantra of organic agriculture.

When we go below a three-to-one ratio such as for nitrate and ammonia, then we're really into the kind of the input substitution mode. that is something that organic agriculture has not We really are dedicated to ecosystems been about. soils and processes and not iust substitutions. So analogy for humans is if we, you know, we take whole foods, you know, that helps our gut flora, that's really the way to adequate nutrition rather than just supplementing or just

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1	eating a vitamin. The 20 percent ratio does let
2	in emergency use or cold soils, it does allow some
3	use of these things, just like you might take a
4	extra vitamin and when you're short of something.
5	But it doesn't allow for the whole use of this,
6	and it also helps put some guardrails on the system.
7	It very explicitly states for manufacturers as
8	they develop some of these products what the
9	potential is. It also means it gives the NOSB time
10	to review these things before they're widely used.
11	So I think it helps set appropriate boundaries.
12	But ultimately, it's just really, you know, it's
13	eating well and it's feeding the soil well and
14	versus an input substitution model. So, I think
15	for that it's really important for the future of
16	organics.
17	MEMBER BRUCH: Thank you, Steve.
18	Appreciate it.
19	CHAIR POWELL-PALM: Anybody else?
20	Questions for Steve? All right. Well, thank you
21	so much, Steve.

1	MR. ELA: Good luck to everybody.
2	CHAIR POWELL-PALM: All right. Next
3	up, Yu Yi Tan, and I don't think we have seen you,
4	if you're here Yu Yi on the list or on the present
5	in the Zoom. So please speak up if you are here,
6	otherwise we'll move on. All right. And if you
7	are here and are having tech difficulties, please
8	just send an e-mail to Michelle, and we can try
9	to put you in at the end there.
10	All right. Next up is going to be Terry
11	Shistar with Beyond Pesticides; after that, Jay
12	Feldman with Beyond Pesticides; and after that,
13	Youngblood with NOC.
14	Terry? And I think we're going to have
15	a presentation pulled up for you. Here we go.
16	Thank you, Andrea.
17	MS. SHISTAR: Okay. Okay. My name is
18	Terry Shistar, and I'm on the board of directors
19	of Beyond Pesticides. This is kind of highlights
20	of our comprehensive written comments. Please
21	deny the petition for CPC, a toxic quaternary

ammonia compound that is being petitioned for use 1 on raw organic poultry. Quats include several 2 3 toxic sanitizers and disinfectants, as well as the highly toxic herbicides paraguat and diquat. 4 residues have been discovered on treated surfaces 5 and poultry skin, exposing workers and consumers 6 7 pesticide unlabeled residues. Ιt is to unnecessary in organic production. 8 9 Please pass the proposal, limiting the use of highly soluble nitrogen fertilizers to 10 11 protect organic integrity, consistent with the 12 principle of feeding the soil, not the plant. Awareness is growing about the environmental and 13 health impacts of plastic and the microplastic 14 15 particles to which it degrades. The NOSB should initial action to eliminate all uses of plastic 16 and organic production and handling, including 17 18 packaging. Biodegradable, bioplastic should not be relisted. 19 20 Many NOSB recommendations have not been addressed by NOP. It is your role in the NOSB to 21

guide NOP and ensure that the conventional industrial agriculture clients of USDA do not control the organic program. Now, NOP has come to the organic community with a request for input concerning the priorities to be assigned to recommendations it has failed to complete.

The organic community has spoken on these issues, but NOP has not done its job. It's improper for NOP to now pit segments of the organic community against one another. NOP must do its job with no excuses. It must ensure that OMB, for example, understands the structure of the organic program, including why nationalist changes as material sunset must give higher priority to completing NOSB recommendations. It is NOP's responsibility to just get it done.

Appendix A of our big picture comments contains our analysis about standing NOSB recommendations. In classifying its progress, NOP creates some categories for which it has decided to ignore the recommendations closed or

1	indefinitely delayed implementation on hold. On
2	hold includes prohibition of aeroponics,
3	clarifying emergency use of synthetic
4	parasiticide, all recommendations concerning
5	excluded methods, the procedure for examining
6	ancillary substances and ammonia extracts.
7	Closed includes containers,
8	eliminating the incentive to convert native
9	ecosystems to organic crop production and sodium
10	nitrate. In addition, other recommendations like
11	the 2010 recommendation on greenhouse production
12	have been ignored. Please see Jim Riddle's
13	comments concerning that. Thank you.
14	CHAIR POWELL-PALM: All right. Thank
15	you so much. And bear with me, everyone, while
16	we have this screen up. There we go. Okay. Any
17	questions for Terry? All right. Seeing none.
18	Thank you, Terry.
19	MS. SHISTAR: Thank you.
20	CHAIR POWELL-PALM: Next up will be Jay
21	Feldman, followed by Abby Youngblood, and Alice

1 Runde with NOC, after Abby. Jay?

Hi. 2 MR. FELDMAN: I'm Jay Feldman, 3 executive director of Beyond Pesticides, and a former NOSB member. Welcome to new, and hi to 4 returning board members. 5 Thank you for your 6 service. Please see our extensive written 7 comments on this meeting's agenda.

> I'd like explain Today, to perspective on the NOSB's role and why we have been engaged with organic for 40 over years. Leadership, this is why the NOSB exists, stakeholder board empowered by Congress to lead USDA on organic transition and standard-setting to lead the transition away from chemical-intensive agriculture. Your leadership is critically important in the midst of existential public health threats from toxic-chemical-induced diseases, biodiversity collapse and the climate emergency. The need for structural changes or systemic change was in effect recognized on the first day of the Biden administration with

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executive memorandum on modernizing regulatory 1 It recognizes the need for our holistic 2 review. 3 approach to government action, requiring agencies "to ensure that regulatory initiatives, promote 4 public health and safety, economic growth, social 5 6 welfare, racial justice, environmental 7 stewardship, dignity equity, human and interest of future generations." 8 9 eliminating fossil-fuel-based Ιn 10 pesticides and fertilizers, we achieve this. 11 hazardous exposure to toxics with 12 multi-generational adverse effects, improve the health and welfare of communities, protect people 13 and protecting farm 14 of color workers 15 pesticides are used. And fenceline communities where toxic 16 17 pesticides are produced. Protect and enhance 18 ecosystems utilize ecosystem and services. 19 Respect life as opposed to setting allowable levels 20 of harm and inequitable consequences. technical review that informs your actions must 2.1

include a cradle-to-grave analysis for you to do 1 fulfill 2 this and your statutory mandate 3 determining allowable materials on the national lens. 4 Last week, the deputy administrator for 5 USDA's NOP said that the Office of Management and 6 7 Budget is a roadblock to your decisions. The failure of USDA follow through 8 to 9 recommendations is a national scandal and tragedy. And in our view, fails to comply with the law. 10 11 As the NOSB, we urge you to call out, reject and 12 stand up to the undermining of your work and false arguments of economic dislocation. 13 It. harms consumer and farmer confidence in the organic label 14 15 and the growth of the organic sector. 16 With this, USDA only helps to elevate 17 the chemical industry, industrialized 18 agriculture, factory farms, abusive working 19 conditions and deadly diseases, and cripples the foundation of organic principle of continuous 20 improvement. 21

1	Remember the law's no additions clause
2	that prohibits the secretary without your
3	recommendation from allowing nationalist
4	substances not recommended by the board. Embrace
5	your role in providing advice to the secretary,
6	bring your voice to this forum and the NOSE
7	agenda-setting, use the power of the board
8	resolutions.
9	And keep pushing back against an agency
10	that still invasions organic as producing niche
11	specialty crops, rather than the original vision
12	in the statute, the cutting edge for the future
13	of agriculture and all land management, ensuring
14	a sustainable thank you.
15	CHAIR POWELL-PALM: Thank you, Jay.
16	Appreciate your comments.
17	MR. FELDMAN: Thanks.
18	CHAIR POWELL-PALM: And I see Brian has
19	a question.
20	MEMBER CALDWELL: Yes. Thanks for
21	your comments. I have two different points here.

And the first one is whether Beyond Pesticides 1 has sort of contamination issues like PFAS and BPA 2 3 in packaging and those things on their agenda for continued, you know, examination and suggestions. 4 And the second one is when an economic analysis 5 is done on the effects of practices or products, 6 7 Ι wonder if Beyond Pesticides has recommendations about how to assess the effect of 8 -- the possible effect of kind of loss of confidence 9 in the entire label. 10 11 In other words, kind of a much bigger 12 picture than just maybe a specific effect on one segment of the industry or something like that. 13 So those two points, please. 14 15 MR. FELDMAN: Yes. You know, thank you for your questions, Brian. You know, the whole 16 17 issue of legacy chemicals has been top of mind in 18 the formulation of the statute and the ongoing 19 implementation. And we struggled with, you know, 20 in eyes on the board, we consistently struggle with background levels, as we call it, right, and how 2.1

to incorporate an evaluation of those levels into allowable products, you know, that achieve the label.

And there are clear, you know, indicators of threshold, levels of harm, which we're still working out with PFAS. Obviously, you know, EPA is working on this as we speak. We've been struggling with this with DDT and DDE, the breakdown product for generations now. And so I think our, you know, under this banner of improvement, which we always talk continuous about, we have to figure out what the threshold of elevated residues and threshold of elevated harm is when it comes to these background levels.

We've often used enforcement action levels that are set by EPA and FDA, as enforcement levels, as we ratchet down allowable residues in the, you know, in the food supply. The point here is, however, that we can't put organic at an economic disadvantage when we are essentially living in the toxic soup of past mistakes. And

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on the thing that we have to stop, I think is this 1 ongoing contamination from drift, from runoff, 2 3 from, you know, volatility and airborne transport. And we have to stop allowing that to 4 impose harm on organic production and organic 5 And this is where I think the NOSB can 6 growers. be very helpful in talking about chemical trespass 7 and how it's undermining consumer confidence in 8 the production practices on organic farms, no fault 9 of the organic farmer or the organic processor. 10 11 We have to get more engaged in this as 12 a community and be more assertive in stopping that non-target drift in all different forms. 13 not sure there's an easy answer to the question. 14 15 I mean, we're struggling this -- Maine, we just have a piece on our website today about the 16 17 struggles in the state of Maine and an attempt to 18 work with farmers and reimburse farmers to the 19 harm, no fault of their own. On the economics of all of this, this 20 is always a challenge. You know, we think of three 2.1

pillars when we talk about regulation under organic 1 standards, we think about, you know, issues of 2 3 adverse effects, issues of compatibility with organic systems and what that means to the soil, 4 5 et cetera. And then we think about essentially, you know, are these materials really essential to 6 7 organic production. And that's where I think the board has 8 9 to look carefully at what is needed and what is 10 not needed. But remember, as you make that evaluation, whether you're talking about soluble 11 12 fertility or anything else, you can't allow that to trump the other issues of harm and compatibility 13 with organic systems. 14 15 So to preserve the value of the label and public trust in that label, we have to think 16 always comprehensively, yes, the economics factors 17 18 into that, but it has to factor into that in 19 conjunction with the other factors under review. 20 Thanks for your question. It's a question. 21

1	CHAIR POWELL-PALM: Thank you. Thank
2	you so much for asking that, Brian.
3	MEMBER CALDWELL: Thanks very much.
4	CHAIR POWELL-PALM: All right. Next
5	up we have Abby Youngblood followed by Alice Runde,
6	followed by Christie Badger.
7	Abby, floor is yours.
8	MS. YOUNGBLOOD: Good afternoon. I'm
9	Abby Youngblood, executive director at the
10	National Organic Coalition. And I would like to
11	start by discussing two critically important
12	issues that the NOSB is considering at this
13	meeting.
14	First, NOC strongly supports the NOSB
15	proposal to limit fertilizers with
16	carbon-to-nitrogen ratios of three-to-one or less.
17	We think passing this proposal is fundamental to
18	protecting the integrity of the organic program
19	and advancing organic as a climate-smart-system
20	of agriculture.
21	As time goes by, more soluble crop

hitting the market. These materials allow farmers to sidestep the soil health requirements and the organic regulations. The NOSB must act now to regulate these highly concentrated and available sources of nitrogen as a group. The development of these fertilizers is taking place at a fast and furious pace, and it may become difficult to spot each of these new fertilizers.

This proposal lays out a clear and enforceable plan to restrict the widespread reliance on highly soluble nitrogen fertilizers in organic production. The second critical issue that NOSB is voting on this spring is excluded methods. NOC strongly supports the recommendation for a formal quidance document from the National Organic Program. We agree with the addition of self-fusion and protoplast fusion as outlined with one small suggestion regarding the definition.

On another topic, I want to urge NOSB

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members to pay close attention to the annual peer 1 review audits at the National Organic Program. 3 This is the mechanism for oversight over the NOP's accreditation process, and the NOSB should take 4 a more active role in evaluating the results of 5 6 these reports and flagging issues of concern. 7 At the NOP's request, for this meeting the NOSB reviewed a risk mitigation table related 8 to real and perceived conflicts of interest. 9 While the information in this table is important, 10 11 it's the tip of the iceberg when addressing 12 conflicts of interest to mitigate risk within the 13 certification process. We encourage the NOP and the NOSB to 14 15 continue to address risk mitigation in a more systematic way. NOC also submitted comments this 16 spring to the National Organic Program, because 17 18 we are deeply concerned about USDA's failure to 19 implement dozens of critically important 20 recommendations over the past two decades. The process is fundamentally broken, and significant 2.1

1	reforms are urgently needed. In our comments we
2	describe 12 recommendations to bring greater
3	accountability and transparency to the NOP's
4	process for implementing NOSB recommendations.
5	We urge the NOSB to use your platform
6	to communicate directly with the secretary and USDA
7	officials about the need to clear the NOSB backlog
8	and make reforms to the process going forward.
9	Thank you so much for considering these comments.
10	CHAIR POWELL-PALM: I think that's the
11	winner so far for timing, so excellent work. Any
12	questions for Abby? Thank you, Abby. Really
13	appreciate your time and comments.
14	Next up is Alice Runde with NOC,
15	followed by Christie Badger and then Russ Housser.
16	Alice?
17	MS. RUNDE: Good afternoon. My name
18	is Alice Runde; I'm the coalition manager for the
19	National Organic Coalition. My comments today
20	pertain to racial equity, technical support and
21	research priorities. On racial equity, there is

increasing amount of evidence regarding the
persistent structural racism in our agricultural
systems, including organic, which has excluded
most black, indigenous and other farmers of color
from farm ownership and participation in organic
certification.

To make sure this topic receives the time and attention it deserves, we ask the NOSB to establish a diversity, equity and inclusion subcommittee to lead this work on the part of the board. The subcommittee's future recommendations could include changes that would make the certification process more accessible to farmers of color, make organic food more affordable and available, and ensure that organic farming pays living wages for farm workers and farmers.

Recent research shows that the cost of organic certification is a challenge for organic producers, and even more so for bi-crop farmers.

The NOSB should strongly advocate for well-functioning and well-funded and

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well-publicized organic certification cost share 1 2 program. 3 We encourage the NOSB to ask the NOP to establish structure and processes that not only 4 invites but also truly supports black, indigenous 5 and other stakeholders of color to join the NOSB 6 and be able to fully partake in NOSB activities. 7 support could include cultural 8 The 9 sensitivity or equity training for NOSB members, appropriate technical support. 10 but also On 11 technical support, NOC appreciates the board's 12 work on this important topic, providing support to NOSB members with broad to work full of potential 1.3 NOSB members, alleviating some of the barriers to 14 15 participation. It would make a very challenging job more manageable. 16 17 We want the board to be appropriately 18 representative of the Organic Community. 19 important to fit the assistance to the needs of the individual NOSB members and to ensure the 20 autonomy of the members' voice. The autonomy is 2.1

threatened if assistants are hired by USDA. 1 NOSB should be able to choose who they would like 2 3 for assistance. The NOSB should also regard the public 4 at large as a part of its support team to use of 5 the open docket. We believe that there is value 6 7 in the open docket, and that with additional assistance NOSB members could make use of this 8 tool. 9 Finally, on research priorities, NOC 10 thanks the material subcommittee for its work in 11 12 identifying research priorities. While there are 13 particular challenges to conducting both participatory research and on-farm research in 14 15 forms, NOC notes the various importance researchers partnering with farmers to engage in 16 the examination of organic systems as they relate 17 18 to organic as a climate change solution. 19 There is so much more to climate-smart 20 agriculture than carbon sequestration. We encourage the board to add the following topics 2.1

1	to the research list, pastor research,
2	conservation tele system, P5, alternative to BPA,
3	GE and organic crop coexistence, and various
4	specifications for black, indigenous, Latinx,
5	Asian, and other research farming communities.
6	All research should be approached
7	through an equity lens, from the research design
8	to results and interpretation.
9	CHAIR POWELL-PALM: Thank you so much
10	for your comments. Any questions for Alice? All
11	right. Thank you very much, Alice. Next up we
12	have Christie Badger followed by
13	PARTICIPANT: Hey, Jerry has a
14	question
15	CHAIR POWELL-PALM: Oh, I apologize.
16	Thank you for catching that. Jerry, all yours.
17	Oh, you're on mute, Jerry.
18	MEMBER D'AMORE: Thank you. And not
19	specifically a question, but I just wanted to give
20	a bit of a shout out to Alice and her group for
21	the work that they did on the NOSB technical

1	support. It was well-thought-out and
2	appreciated. Thank you.
3	CHAIR POWELL-PALM: Thank you, Jerry.
4	All right. Next up we have Christie
5	Badger followed by Russ Hauser and then Amalie
6	Lipstreu.
7	Christie? Oh, you're on mute,
8	Christie.
9	MS. BADGER: Thank you. Thanks, and
L 0	nice to see everyone. I'm Christie Badger, and
L1	I'm a consultant with the National Organic
L2	Coalition. Thank you for your time and service
L3	on the board.
L 4	I'll start with oversight improvement
L5	to deter fraud. On the inclusion of crop acreage
L 6	on organic certificates, we are supportive, but
L7	suggest a sound and sensible approach as outlined
L 8	in our written comments. The number of animals
L 9	in livestock operations should also be listed on
20	certificates, allowing for the ratio of animals
21	to acres of pasture to be considered.

Annotation suggestions. We encourage 1 the NOSB to include an ongoing work agenda item 2 3 regarding annotation changes to be considered outside of the sunset review process. 4 to do that, there's a need for a guidance on 5 6 annotations, a reference on how they should be written, to allow for consistency and clarity. 7 This work would address one of the most prevalent 8 9 issues we deal with today regarding certification, inconsistencies among certifiers, by providing 10 11 better clarity for interpretation and allowance 12 for use. Carbon dioxide proposal. Send it back 13 The petition involves 14 subcommittee. 15 different uses as an acidifying agent in irrigation water in which the pH is high and as a soil or plant 16 17 At the fall 2021 meeting, amendment. 18 proposal was sent back to subcommittee to address Unfortunately, the spring 2022 19 the second issue. 20 proposal includes no discussion regarding CO2 as a plant growth enhancer, yet again. 2.1

CPC, we support the recommendation of 1 the handling subcommittee, the petition should be 2 3 rejected. This petition does serve to point out an important issue that needs to be addressed, 4 The notes within the handling scope are 5 however. referred to as ancillary substances. 6 7 While the NOSB made a recommendation regarding how to handle such substances in spring 8 9 2016, the NOP has failed to act on this 10 recommendation. Currently, the NOSB has 11 criteria on how to act on this petition, 12 therefore the petition could not move forward. 13 Phosphoric acid annotation change. Phosphoric acid poses health and environmental 14 15 hazards, it's not necessary and is incompatible with organic practices. The additional use should 16 17 be denied. 18 Tall oil petition. The petition is for 19 the use of distilled tall oil as a so-called inert 20 ingredient organic livestock in crop and production. Currently the NOP has failed to act 2.1

on the NOSB recommendations that would provide a 1 framework for addressing inerts. Therefore, the 2 3 NOSB has no criteria to act on this petition, and the petition cannot move forward. Thank you so 4 much. 5 6 CHAIR POWELL-PALM: I see we have Amy 7 has her hand up. MEMBER BRUCH: Okay. Morning. Thank 8 9 you, Christie, for your oral comments just now, and then kind of the whole gamut of NOC and all 10 11 your comments, so I really appreciate it. You 12 mentioned consistency and clarity is very 13 important, and I would agree with that, it's important across the whole community. 14 15 Abby mentioned that HSN, the highly soluble nitrogen practice standard is clear from 16 17 NOC's point of view. So that was helped to hear 18 The one thing I wanted to ask you on the that. 19 annotation piece, I think that's a great addition 20 to your comments, this living document about some of the work in progress on annotations that need 2.1

to be addressed. Is it possible to maybe work 1 through a prioritization list on that? 2 I think 3 they're probably all important to do to tomorrow, but just so we can potentially balance, you know, 4 those needs, in addition to the other work agenda 5 items, I think it would be helpful to maybe get 6 7 a priority list. Amy, thanks for asking. 8 MS. BADGER: 9 And I think that if that is something that you guys think would be helpful, we could certainly 10 11 do that. I think we intentionally didn't do 12 anything like that, thinking that, there might be areas of interest. You know, somebody on the board 13 might say oh, I'm interested in this one. 14 Hey, 15 how about we address this one next meeting? 16 But we can certainly, you know, easily 17 do something like that. And then you guys can look 18 at them and skip over as you see fit or whatnot. 19 But thanks for asking about that, and we just 20 thought that it could be helpful. Every time we review sunset materials we, a lot, suggest, and 2.1

1	others do as well, oh, an annotation change would
2	be helpful here or and then they don't get me
3	because they're outside of the sunset process.
4	So we were just trying to kind of put forth another
5	one of those low-hanging fruit items, because there
6	are a lot of heavy lifts that you guys work on,
7	but this one is, would be a little bit lighter lift,
8	maybe.
9	MEMBER BRUCH: Thank you. Appreciate
10	that, Christie.
11	MS. TUCKER: Is everybody else frozen,
12	or am I?
13	MEMBER BRUCH: Oh, I can hear you.
14	MS. TUCKER: Okay. It looks like
15	Nate's frozen. I'm not sure.
16	MS. ARSENAULT: He just did text and
17	say everything froze
18	MEMBER BRUCH: Yes, it is frozen. Dic
19	you get back, Nate?
20	CHAIR POWELL-PALM: My apologies.
21	I'm back.

1	MEMBER BRUCH: Okay, great.
2	CHAIR POWELL-PALM: Any other
3	questions for Christie? Thank you, Amy.
4	All right. Thank you so much,
5	Christie, for all of your work.
6	MS. BADGER: Thank you.
7	CHAIR POWELL-PALM: And for always
8	packing so much into your comments, and I really
9	appreciate it. No time wasted.
10	Next up we've got Russ Hauser, followed
11	by Amalie Lipstreu, and then Julia Barton. Russ,
12	the floor is yours.
13	MR. HAUSER: Yes. Thank you very much
14	for the opportunity to comment. I'm Russ Hauser,
15	a professor at Harvard Chan School of Public Health
16	and Harvard Medical School.
17	Today I'm speaking as part of Project
18	TENDR. It's a collaboration of scientists, health
19	professionals, and advocates concerned with toxic
20	chemicals that can harm children's brain
21	development. I spent over two decades researching

the human health impacts of a class of industrial 1 chemicals called phthalates, which are widely used 2 3 in food processing and packaging. Last year, several of us in Project 4 TENDR published an article in the American Journal 5 6 of Public Health, identifying phthalates neurotoxic chemicals that can do lasting harm to 7 child brain development and increase children's 8 9 risk for learning, attention and behavior 10 disorders. In particular prenatal exposure to 11 phthalates are associated with attention problems 12 in children. In the last 2 years, since we reviewed 13 the evidence, more than 30 new human studies have 14 15 been published, fighting an association between phthalates and problems with children's cognition, 16 attention and behavior. Phthalates have also been 17 18 long known to harm reproductive organs in boys, 19 specifically reproductive tract development. 20 Women, children and men are exposed to multiples phthalates every day. Black and Latina 2.1

women of reproductive age have higher exposure to 1 2 phthalates as compared to white women, regardless 3 of income level. And we know that phthalates readily transfer from the mother to the fetus. 4 While regulatory action has eliminated 5 or reduced some phthalates from children's toys 6 and cosmetics, diet remains a primary source of 7 Phthalates have been shown to leach 8 exposure. 9 into food from plastic equipment such as tubing, lid gaskets, food preparation gloves, conveyor 10 11 belts, bottle caps and packaging materials. 12 Phthalates leach into organic food just as they leach into non-organic food. 13 For example, the organic food company 14 15 Annie's Homegrown has determined that Phthalates detected in their macaroni and cheese products are 16 coming from processing equipment and packaging 17 18 materials. These harmful chemicals should not be permitted in any food production and packaging 19 20 materials. organic label 2.1 Moreover, the

appropriately holds organic food production and 1 packaging to a higher standard. Consumers expect 2 3 organic food to be free of introduced toxic Because phthalates leach from food 4 chemicals. contact materials into food and people are widely 5 6 exposed to multiple phthalates, with higher 7 of color, rapidly exposures to women and accumulating evidence finds levels of phthalates 8 9 can do lasting harm to children's brain, we request the NOSB to prohibit phthalates from use in food 10 11 production packaging, and to prevent the 12 inevitable introduction of synthetic harmful chemicals into organic food. 13 thank you for considering 14 15 request, and happy to answer any questions you may 16 have. 17 CHAIR POWELL-PALM: Thank you very 18 much for your comments. Any questions? Amy --19 Russ, thank you so much MEMBER BRUCH: 20 for being here today and your written and oral comments, and the collaborative effort of the 21

comments that you had. I just have a question. You mentioned 2 3 the importance of food packaging and food contact materials to look at the elimination of these 4 Do we need to cast a wider net and also 5 look at some of the non-food products in the organic 6 community as well? Just because I believe the \$62 7 billion industry that our organic community 8 9 represents is food and non-food, you kind of mentioned the packaging equipment, but I mean I'm 10 11 even seeing on, you know, some shampoos and things 12 like that, that have potentially some of these chemicals involved in those. 13 14 MR. HAUSER: Yes. So, so phthalates 15 are found in many different products. you're referring to personal care products. 16 17 mean, they're founded in soaps and shampoos and 18 perfumes, deodorants, et cetera. So that's 19 another source of exposure. 20 For some of the phthalates though food is a primary source of exposure, specifically one 2.1

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1	of the phthalates called DEHP, di(2-ethylhexyl)
2	phthalate, which is used as a plasticizer to soften
3	vinyl, plastic, or PVC plastic, and it leached out
4	of that plastic, so if it's in contact with foods
5	or grain, cetera. The vinyl plastic is about 30
6	percent by weight phthalates and it's not
7	covalently down, which means it's not a chemical
8	bond, so will leach out into products.
9	I don't know if that's specifically
10	what you were getting at or with this, you know.
11	MEMBER BRUCH: Yes, that was helpful.
12	MR. HAUSER: Phthalates are in
13	probably thousands of different products, but for
14	some of them, especially DEHP, we clearly know that
15	food is a primary source for human exposure.
16	MEMBER BRUCH: Okay. Thank you.
17	CHAIR POWELL-PALM: Thank you for that
18	question, Amy.
19	Javier?
20	MEMBER ZAMORA: Thank you. Yes, I
21	guess I'm not, I thought I was mute.

1	Russ, thank you so much for your
2	comments. You partially answered that question
3	when you were answering to Amy. But I wanted to
4	first of, I'm a farmer, I'm not a scientist,
5	and we rely heavily sometimes on scientists to tell
6	us what's going on and how sometimes organic food,
7	when it's packaged, gets changed into non-organic.
8	You said several things in how minority
9	communities are involved, are impacted by these
10	leaching chemicals in our food. Can you give me
11	I know you gave some examples to shampoos and
12	that sort of thing. I can tell you that, in my
13	head I was thinking of when you get a bottle of
14	water and you keep it under the sun, when we're
15	out on the field, and then you drink later out of
16	it and it tastes different. So there must be, you
17	know, some sort of leaching there. So I just
18	wanted to hear a little more on how communities
19	of color and perhaps lower-income communities are
20	impacted in a heavier way? Thank you.

MR. HAUSER: Sure.

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Thanks for

Sure.

1	the question. So communities of color and
2	low-income do have higher exposure, and a lot of
3	this data comes from so something called NHANES
4	the National Health and Nutrition Examination
5	survey, NHANES. That is a survey that the CDC
6	does, and they measure concentrations of chemicals
7	and metals in several thousand U.S. citizens each
8	year, and it clearly shows higher levels of
9	phthalates as well as other chemicals and metals.
10	And the sources of these are probably
11	multifold, they're probably coming from, you know,
12	foods and food packaging and the different types
13	of foods that are available to these communities,
14	also coming from, you know, different products that
15	they may use in terms of personal care products
16	as well. And then of course, there's, you know,
17	other sources, from pollution and other sources
18	as well. But the NHANES data, you know, clearly
19	shows differences, and especially for some of the
20	phthalates among these communities having higher
21	levels in their body.

1	MEMBER ZAMORA: Thank you. And I just
2	wanted to mention something, maybe it's a little
3	typo for people that are doing the writing on the
4	screen, when he talks about phthalates on this,
5	it's saying solid. So I think we probably need
6	to fix this because it's a big difference there.
7	MR. HAUSER: It's
8	P-H-T-H-A-L-A-T-E-S. Thank you, Javier for that.
9	CHAIR POWELL-PALM: You can get
10	close-captioning, yes.
11	MR. HAUSER: Yes.
12	CHAIR POWELL-PALM: Thank you, Javier
13	for that question.
14	Rick? Oh, and you're on mute, Rick.
15	MEMBER GREENWOOD: Follow up on
16	actually what Javier brought up. So I'm curious
17	though, have there been some real epidemiological
18	studies on phthalates and the racial disparities?
19	I know there's the NHANES study, but has it been
20	more closely examined just for the phthalates to
21	see where people are getting them by racial

differences? You know, is it food habits, is it 1 industrial or is it where individuals live? 2 3 mean, do you have, have you looked more closely at that? 4 There are studies MR. HAUSER: 5 Yes. that have -- Rick, thanks for that question, that 6 7 have looked at differences or explanations for the differences. There's work that Ami Zota has done, 8 9 Z-O-T-A, and she's focused a lot on, you know, racial, ethnic differences, income differences in 10 11 terms of exposures. 12 And the three things you mentioned are really explaining it, which includes the, you know, 13 foods in terms of, you know, consuming more foods 14 15 that are packaged or processed in certain ways, the personal care products, and then also where 16 17 they live, where their communities are in terms 18 of if they're, you know, close to industrial sites 19 or pollution. 20 there are studies in the peer So reviewed literature 2.1 that do identify

different sources. Some have focused more on food 1 Others have focused more on the 2 than others. 3 personal care products that have been used. MEMBER GREENWOOD: Okay. So, again, 4 5 focusing more closely than on the phthalates in 6 pollution, is that an air quality issue or are you 7 saying it becomes a water issue, in municipal What's the explanation for that? 8 waters? 9 MR. HAUSER: Yes. So phthalates, as 10 compared to other chemicals, I think primary routes 11 and sources of exposure are really more from the 12 products that we come in contact with in the food, 13 less so from air and water, even though the phthalates do end up in air and water, but the 14 15 contribution to human exposure from those considered low as compared to, you know, other 16 17 pollutants, such as from water. Phthalates, I 18 would say, I would classify them more as, you know, 19 exposure from consumer products and foods as a 20 primary -- yes. Okay. 21 MEMBER GREENWOOD: Yes, it's

1	interesting. I used to run an analytical
2	chemistry lab, and you couldn't get water without
3	phthalates. I mean
4	MR. HAUSER: Oh, yes, yes.
5	MEMBER GREENWOOD: It's almost
6	impossible. So I know they're widespread, but I
7	was just curious about these.
8	MR. HAUSER: Yes. I mean, that's
9	interesting because I first got into this research
10	in early 2000, working with some scientist at the
11	CBC, and we were actually looking at measuring
12	different classes of chemicals, and they kept
13	having traces of contaminant in the water and the
14	reagents in the lab just because they're so
15	ubiquitous.
16	So what you, you know, just pointed out
17	is still true today and really led to kind of a
18	lot of the interest in research in phthalates
19	because they're so widespread and ubiquitous, in
20	our environment and also in people.

MEMBER GREENWOOD: Okay.

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Thank you.

1	MR. HAUSER: Sure.
2	CHAIR POWELL-PALM: Brian?
3	MEMBER CALDWELL: Yes. Thanks, Russ,
4	for bringing up this issue. I really hope we can
5	address it, but I had a quick follow-up to Javier's
6	question. I have always wondered what it was the
7	favors (phonetic) that you get from water. And
8	it seems like they're, you know, definitely in the,
9	you know, parts per million or higher range because
10	we can taste them pretty clearly.
11	MR. HAUSER: So, you were asking the
12	question about, Javier was asking about, you know,
13	bottled water when it's in heat and sunlight.
14	MEMBER CALDWELL: Yes, yes.
15	MR. HAUSER: Yes.
16	MEMBER CALDWELL: Exactly.
17	MR. HAUSER: Yes, so probably more than
18	you want to know, or, you know, it's as I'm a
19	physician that actually got into research looking
20	at human health effects, but quickly learned that
21	there was a lot to learn in terms of polymer

chemistry. So, a lot will depend on the type of plastic that the water is in, in terms of what chemicals may leach out from the plastic into the beverage or the water that you're drinking.

If you're referring to those, you know, the typical bottles that you buy in convenience stores, et cetera, grocery stores, those actually made from a different material that does not contain what we call ortho-phthalates, but it is a different type of plastic, it's a polyethylene terephthalate, it's not an ortho-phthalates sorry for a lot of the organic chemistry. But it's a different type of plastic and it contains both, antioxidants, it's you know, also contains antimony, which is a metal.

And there's been studies that have been done. I'd worked with actually a group in Cyprus where, you know, they have extremely hot summers and strong solar amounts, you know, and we were able to measure in these plastic bottles higher levels of chemicals, including Bisphenol A

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specifically. But the bottles you're probably
2 referring to, if you look on the bottom of the
3 bottle, you'll see that it says PET, you know, where
4 the recycling label is, that's polyethylene
5 terephthalate. Even though it has the word
6 phthalate in it, it's not the ortho-phthalate that
7 I'm referring to when we talk about the harmful
8 effects to children's brain development. But
9 there are many other chemicals in those bottles.
And the heat and the sunlight will increase
leaching of the chemicals into the water or fluid
that's in the bottle. Does that answer, Brian,
13 what you were kind of getting at in Javier
MEMBER CALDWELL: Yes, thanks a lot.
We might consider here, yes.
MR. HAUSER: Yes. It becomes
17 CHAIR POWELL-PALM: We're going to
18 have
MR. HAUSER: very quickly.
20 CHAIR POWELL-PALM: We're going to
21 have to keep going. But if we have additional

resources, Dr. Hauser's contact information is 1 available to members who can reach out directly. 2 3 All right. Movina on. Lipstreu, followed by Julia Barton, and then Astrid 4 Jacobs de Padua. 5 Thank you, Nate. 6 MS. LIPSTREU: Good 7 National members of the Organic afternoon, Standards Board. I'm Amalie Lipstreu, policy 8 9 director at the Ohio Ecological Food and Farm I really want to thank you as a board 10 Association. 11 for taking leadership on the role of organic 12 agriculture in addressing climate change and food systems resilience. 13 heartening 14 that increasingly 15 scientists' organizations among the conservation professionals I have the privilege 16 of working with, they increasingly speak of the 17 18 need to use systems thinking in addressing the 19 problem of climate change. Despite the growing 20 prevalence of the term regenerative agriculture, we know that it offers no uniform standards, no 2.1

1 governing body and no oversight.

Organic agriculture, as we all know,

is the only system of agriculture offering that,

plus the synergistic suites of practices that make

this voluntary system of agriculture a key solution

for the climate crisis.

Unfortunately, as we have seen, the U.S. Department of Agriculture is reticent to say anything that might confer benefits to organic Your letter to the secretary was both systems. well-timed and sorely needed. Unfortunately, the response from the director is to add this item to her work agenda, along with a number of heady questions to answer. As stated in OEFFA's written comments, this could be the sole item on the board's agenda for years and still leave room for more discussion and research. We're happy to see you take on this subject and at the same time make your concerns known to USDA leadership, that this is the work of the department as a whole and should not rest on the shoulders of a part time volunteer

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1 board.

Please know that we will do everything 2 3 we can to ensure you have access to the farmers, researchers and resources you need to do this work, 4 and also encourage you to continue asking USDA to 5 commit staff and resources to this effort as well. 6 And importantly, break the code of silence around 7 the numerous co-benefits of organic agriculture. 8 9 Also, as we promote the role of organic agriculture, providing solutions to the climate 10 11 crisis, we need to caution that hydroponic systems 12 are dependent on the highly soluble nitrogen fertilizers and not the kind of systems approach 1.3 supportive of climate change solutions. 14 15 And finally, we do support the proposal from the board to limit highly soluble nitrogen 16 fertilizers with carbon-to-nitrogen ratios of 17 18 three-to-one or less, including those individual 19 components of blended fertilizer formulations. 20 And our certification colleagues have reviewed the language and feel comfortable with monitoring and 2.1

enforcing those provisions. Thank you for your 1 time. 3 CHAIR POWELL-PALM: Thank you for your Any questions for Amalie? All right, 4 comments. seeing none we'll keep going. 5 Thank you, Amalie. Julia Barton is up next. Astrid Jacobs 6 de Padua, if you are here, if you are here, would 7 you make yourself known please just put something 8 9 in the chat box. We're not seeing you. And then Harold Austin after that. 10 11 So, Julia, the floor is yours. 12 MS. BARTON: Thank you, Nate. Hi. everybody. Welcome new board members. 13 It's nice to meet you virtually. I am Julia Barton with the 14 Ohio Ecological Food and Farm Association. I'd 15 like to highlight a few comments, a few topics from 16 our written comments today. First, hydroponic and 17 container systems, OFFEA is part of a group of 18 certification, education and policy organizations 19 who agree that soil is the foundation of organic 20 agriculture and who strive to achieve consistency 2.1

organizational policies related 1 in our certificate and certification decisions. 2 3 aeroponic hydroponic and crops grown to maturity in containers do not comply with OFFEA and because 4 there is significant inconsistency in the way these 5 6 forms of production are being handled by organic certifiers presently, we urge the board to call 7 for a moratorium on the certification of these 8 operations until we can utilize our existing NOSB 9 10 and rulemaking process to move forward with greater 11 consistency. 12 The timing and format of meetings. need more farmer participation in the NOSB process. 13 To this end, OFFEA's grain grower chapter has 14 15 continually requested an alternative to current meeting schedule. 16 Most recently, they 17 have proposed moving the schedule back 2 weeks each 18 meeting. This would mean the meeting would rotate 19 throughout the year, equally benefiting 20 inconveniencing various stakeholders over time. We believe farmer participation is also 2.1

a priority of the board. And we're wondering how 1 2 we can work together to ensure that the meetings 3 are scheduled to maximize input from a variety of organic production systems and producers across 4 5 the country. Racial equity. OFFEA appreciates the 6 work of the current administration to bring equity 7 issues to the fore within USDA, and the efforts 8 9 of our colleagues at NOC and others to bring these issues to light within the organic community. 10 11 support NOC's racial equity comments and have the 12 following two specific requests. 13 We request the board establish diversity, equity and inclusion 14 subcommittee 15 within the NOSB. We also request the board add 16 fairness standards to the NOSB work agenda or work 17 through the process to add them to the work agenda 18 and then work to develop them. 19 Finally, highly soluble nitrogen 20 fertilizers. Organic agriculture is a systems approach which is intended to feed the soil not 21

1	the crop. Office appreciates the board's thorough
2	work on this topic and supports the addition of
3	this motion to 205-105. Our certification
4	department anticipates being able to manage this
5	restriction much as they did with sodium nitrate
6	in the past. They feel confident that we as a
7	community, farmers and certifiers can work this
8	out. You'll be hearing from several OFFEA farmers
9	directly on Thursday. Thank you again for your
10	time and for your service.
11	CHAIR POWELL-PALM: Thank you for your
12	comment, Julia.
13	Logan has a question.
14	MEMBER PETREY: Hi, thank you, Julia.
15	So, there are some farmers on the board and we
16	all agree that sometimes April and October are very
17	tough, you know, to make it. So, just curious, when
18	you said the 2 weeks prior, are you meaning each
19	year 2 weeks prior again, is that what you're
20	implying to make it different.
21	MS. BARTON: Yes, ma'am. That was one

1	suggestion by the Grain Growers Chapter. I think
2	that was Eli, Dean, maybe a meeting or two ago.
3	But it was just one idea.
4	MEMBER PETREY: Yes.
5	MS. BARTON: They've proposed several
6	ideas over time, because we feel strongly that it's
7	not really fair to just ask the farmers to multitask
8	while they're doing everything else that they're
9	doing in the spring. And we also recognized that
10	different growers have different busy times of the
11	year. So, it would be fair if we rotated the
12	meeting, so kind of like Ramadan or, you know,
13	various other lunar calendar holidays, it would
14	move throughout the year.
15	MEMBER PETREY: Sure. I mean, yes, it
16	is tough. These times of year are our busiest
17	times here in the southeast. I know it is in other
18	places. But it was an interesting concept. I
19	appreciate it. Thank you.
20	MS. BARTON: Yes, ma'am. Thank you.
21	CHAIR POWELL-PALM: Thank you, Logan.

1 Amy?

2	MEMBER BRUCH: Thank you, Nate.
3	Julia, thank you. I appreciate all of this
4	comments, the written ones and the near-recurrent
5	oral comments as well. Hopeful to hear that the
6	practice standard for HSN is clear from your
7	certifying perspective. Had a question, it was
8	geared towards your written comments on one of the
9	CACS' work agenda items. OFFEA, I know, is
10	currently capturing acres by products on
11	certificates. And there was some comments just
12	in general from the community that, you know, that
13	particular question it can work very easily for
14	grain farmers. I know your written comments, you
15	mentioned how potentially that could be handled
16	for livestock. I was wondering if you had any best
17	practices on how you guys are doing acre collection
18	by crop for small acres and mixed vegetables?
19	MS. BARTON: Sure, that's a good
20	question. We did have that conversation
21	internally. And I'm not sure if we spelled it out

1	in our written comments. So, if it's very small
2	acreages of mixed vegetables, we generally list
3	it as mixed vegetables on the certificate. If
4	someone has a contract with a grocery store, chair
5	or a large grocer where the grocer is requiring
6	for, or any buyer is requiring, for instance, that
7	those products are listed individually, then we're
8	happy to do that as well.
9	If anybody's got large quantities of
10	a certain crop, we definitely want to make sure
11	that we do that. But if we've got an, you know,
12	let's just say an acre, 3 acres or less of mixed
13	vegetables, we generally list it as mixed
14	vegetables. But if we have questions from buyers,
15	we're happy to provide additional documentation
16	in support to the grower, certainly.
17	MEMBER BRUCH: Okay. Wonderful.
18	Thank you, Julia, appreciate it.
19	MS. BARTON: Yes, ma'am. Thank you.
20	CHAIR POWELL-PALM: Thank you for that
21	question, Amy. Javier?

Julia, thank you 1 MEMBER ZAMORA: much for taking the time, and your comments. 2 As 3 a founder, I feel that we get really good support from organizations like yourself, that I frankly 4 believe that the NOSB does need to pay a little 5 closer attention to the farmers' needs, especially 6 the working farmers that, I can tell you about 7 myself, speaking about myself, how difficult it 8 9 is to really feel like you're being given the best you can to support the decisions that have been 10 -- that are on the table to be decided on. 11 12 And when you have a working farm, you work 24/7, this includes Sundays. I think I can 13 tell you that on only Sunday after 5 p.m. it's my 14 15 dav off. So, when all these needs that the board requires you to go through different sources of 16 research and different readings, not to mention 17 18 the time away from the farm, it's very difficult 19 for a working farm. If you're a retiree, you're okay, you 20 need something to do. But when you are depending 2.1

1	on, you know, 50, 60 people are depending on what
2	you do, on a working farm that is family-owned,
3	it
4	CHAIR POWELL-PALM: Thank you for
5	that, Javier. It blacked out there for a second.
6	Is that where you finished?
7	MEMBER ZAMORA: Yes, that's fine.
8	CHAIR POWELL-PALM: Sorry about that.
9	Yes. Okay. Thank you, Julia. I will just give
10	a shout out to the OFFEA Grain Growers Chapter that
11	despite it being inconvenient, you all still
12	participate, which I'm very grateful for. I
13	myself was farming in a blizzard right before we
14	got on here, and it is never convenient, crops need
15	to get in, but I appreciate everyone who still shows
16	up. All right. Thank you, Julia.
17	Astrid, I don't think we were able to
18	locate you. Please send a shout on e-mail if you
19	are on, and we'll try to fit you in. Next up will
20	be Harold Austin; followed by David Epstein, if
21	you're on, I think David we weren't able to locate

1	either; followed by Jaydee Hanson.
2	So, Harold, the floor is yours.
3	MR. AUSTIN: All right. Thanks, Nate.
4	Good morning, everybody. My name is Harold
5	Austin or good afternoon, I guess, depending
6	on where you're located. My name is Harold Austin.
7	I serve as the chair of the Science Advisory
8	Committee for the Northwest Horticultural Council,
9	as well as their organic subcommittee. I'm the
10	director of orchard administration for Zirkle
11	Fruit Company, located here in Selah, Washington.
12	CHAIR POWELL-PALM: I apologize,
13	Harold. Michelle, it seems like the timer didn't
14	start.
15	MR. AUSTIN: I'm okay with that.
16	CHAIR POWELL-PALM: Yes, I know. I
17	was going to say that.
18	MS. ARSENAULT: I usually start it
19	after name and affiliation. He's still going with
20	that affiliation.
21	CHAIR POWELL-PALM: Oh, okay, okay,

sorry, sorry. Go ahead. I apologize. 1 2 MR. AUSTIN: Okay. My comments of 3 support are on behalf of the organic crop producers and handlers here in the Pacific Northwest and 4 across the country. I wish to begin by thanking 5 all of you serving on the NOSB for taking the time 6 7 to take and share in the duties of this tremendous responsibility. Thank you, each of you. 8 9 For handling, I support the relisting of nitrogen and carbon dioxide. Both of these are 10 11 used in our controlled atmosphere storage of our 12 organic apples, to slow down fruit respiration. We would not be able to compete with conventional 1.3 apples, which have a plethora of materials to use 14 15 in later marketing timeframes without the use of these two materials, they are crucial in our 16 packing and storage of operations of our organic 17 18 apples. 19 For crops, please see the two documents 20 t.hat. Τ submitted which provide detailed description in support of several materials, some 21

of which are micronutrients, sticky traps,
coppers, humic acids, polyoxin D zinc salt and
several others, all of which we currently use in
our organic farming operations.

For the CACS, the discussion document on the NOSB Technical Support Initiative, while I wholeheartedly support the concept of providing additional assistance to the NOSB members, I'm 100 percent against outsourcing this assistance to any university or nonprofit personnel. Both of these scenarios involve entities that do not fall under the same federal oversight and scrutiny as the AMS or the NOP.

Both also potentially could fall prey to outside influences that potentially further erode stakeholder trust in the NOSB process. By building technical supports from within the staff of the NOP or the USDA, you were building for their future. And by that I mean selecting a selected staff personnel for maybe a couple people to serve on the various subcommittees, begin to build

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historic knowledge around each of the materials 1 that extend the decision-making process involving 3 those materials. This then becomes unbelievable source of information of 4 discussions, issues related around each of these 5 6 materials. While the NOSB members eventually will sense that off themselves, hopefully the staff will 7 remain, that's providing a critical and valuable 8 resource for the future NOSB members that follow 9 in their place. 10 11 When I served on the NOSB, we had a 12 tremendous resource in Emily Brown Rosen, she was absolutely amazing. Her historic knowledge of the 13 materials, the discussions around each material 14 15 was absolutely phenomenal and gave us information that we couldn't find otherwise. Please build for 16 the future and realize that the decisions that you 17 18 are involved in making impact organic growers, 19 packers, producers, their ability to compete, let 20 alone to stay in business.

As far as allocations, I urge caution

to not be overly prescriptive or restrictive on 1 the various materials that you're going to be 2 3 voting on. God bless, and have a safe and wonderful spring meeting. 4 5 CHAIR POWELL-PALM: Thank you so much, Harold. 6 7 Brian has his hand up. MEMBER CALDWELL: Yes, thanks, Harold. 8 9 I think we're really going to struggle with this issue of kind of who's kind of eligible to be 10 11 advising or and doing technical assistance to the 12 But you mentioned Emily Brown Rosen and Zea Sonnabend as fantastic resources, but they would 13 be unavailable if we had to rely on USDA or 14 15 university staff. And so, they're still around, they still know just is much as they did before, 16 17 but we wouldn't be able to use people like them. 18 And so, I'm just wondering if you feel like the 19 sort of pool could be expanded a little bit. 20 MR. AUSTIN: You know, Brian, yes, I wouldn't be against that. I guess, I would just 21

I think one of the reasons I stay within the process whether it's USDA, NOP, AMS, is that your billing staff resource that then can be utilized for individuals following in your footsteps at a later date and time. Emily at the time, she was employed as a staff member of the NOP. So, I mean, so I mean, that's why I fall into that, but I'm critical of going too far outside the scope of control within AMS, NOP itself, just because then there's other outside influences that become a factor within that.

One of the things that I didn't mention in my oral comments, that I mentioned on written was there's also the use of working groups, like we had the tree fruit working group when we were dealing with the antibiotics. I don't think that the NSOB is utilizing that process or being allowed to utilize that process anywhere near as much as you should be able to. I think that's a valuable resource that you guys really need to take and have

1	a talk with the NOP and see about how do you
2	implement that on the various subcommittees and
3	utilize that as another tool and resource, its
4	value.
5	MEMBER CALDWELL: Thanks, Harold.
6	CHAIR POWELL-PALM: Thank you for that
7	question, Brian. Rick?
8	MEMBER GREENWOOD: Yes. Thanks,
9	Harold. And I completely agree with you. I think
10	when I joined the NOSB, about, you know, almost
11	5 years now. The ability to have NOP staff give
12	you the historical context for the decisions that
13	were made, I think was invaluable. And I think
14	that's something, especially for new board
15	members, where you really can rely on people that
16	don't have a vested interest in the outcome. So,
17	I agree with you. Thanks.
18	MR. AUSTIN: And Rick, one of the
19	things, circling back around a little bit to
20	Brian's would be, if you wanted to expand the pool
21	from which you could draw those resources from,

1	maybe it's a pool that's made up of past NOSB
2	members. That might be another option that could
3	help provide some of that information and some of
4	those resources for you.
5	MEMBER GREENWOOD: No, thanks.
6	CHAIR POWELL-PALM: Thank you for
7	that, Harold. It's a big topic. I think it's
8	going to be very impactful for all of us. So, thank
9	you for your insights.
10	I don't think we're seeing David
11	Epstein, we're going to move on to Jaydee Hanson,
12	and then followed by Harriet Behar before we break.
13	So, Jay, you on.
14	MS. ARSENAULT: On the call, let's see
15	if he's having trouble. Oh, there you are.
16	Jaydee, we can't hear you. Although you don't have
17	a red X through your microphone. No, not now.
18	CHAIR POWELL-PALM: No. Still no
19	volume, nope.
20	MR. HANSON: Can you hear me now?
21	CHAIR POWELL-PALM: There we go.

It must be my 1 MR. HANSON: Okay. 2 headset. Technology does not always help us. 3 Even though it's -- so I'm using half the technology I had. 4 Jaydee Hanson, I'm the policy 5 director at the Centre for Food Safety. 6 7

a longtime supporter of Organic Program. to comment quickly on two things. One, we very much would like the National Organic Program to finalize as regulations, it's the excluded methods language that the NOSB has been going through for the last -- well, since 2016. We think basically with the addition of language in vitro nucleic acid replacing technologies, recombinant technology, that would set up a situation where the new methods that came in would be weighed against the -- standard is, you know, was it derived techniques of in vitro nucleic acid from technologies and that would help with the immediate discussions around cell fusion and protoplast

fusion, but also gene editing and other process

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1 as well. We do think that it's time that this 2 3 be part of the regulations related to OFFEA, not just quidance documents, not just advice 4 5 certifiers. On biobased mulch, we are concerned about the increased use of nanochemicals 6 7 biobased polymers, we support biobased polymers but we think that as the NOSB looks at them, they 8 9 need to make sure that nano cellulose, nano clays and other nano ingredients in plastics be assessed 10 11 and not migrate out of the plastics into the soil 12 or out of the plastics into foods. So, we are also very concerned about 13 workers breathing nano clay and nano cellulose as 14 15 they work with these products. And you have way more in our discussions. And finally, for the last 16 17 several meetings we've urged the NOSB 18 interference.)

from our members? Seeing none, we're going to move

CHAIR POWELL-PALM:

much for your comments, Jaydee.

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So

All right.

Any questions

1	on to Harriet Behar, and then we're going to take
2	a break. Following the break we'll have Beth Rota,
3	Lee Frankel and then Jake Evans. Harriet? Oh,
4	yes.
5	MR. EPSTEIN: This is Dave Epstein.
6	I apologize sincerely, I had it on my schedule for
7	noon.
8	CHAIR POWELL-PALM: All good.
9	MR. EPSTEIN: I was just involved with
10	an interview for a candidate we're hiring in
11	Washington State and someone called me and said
12	you folks were calling my name. So, I'm really
13	sorry I'm late. But if there's an opportunity,
14	I'm here, I can present.
15	CHAIR POWELL-PALM: Yes, we'll work
16	with the NOP team to fit you in. So, please stand
17	by.
18	MR. EPSTEIN: Yes, thank you.
19	CHAIR POWELL-PALM: Harriet, all
20	yours.
21	MS. BEHAR: Hi, my name is Harriet

Behar, organic farmer, environmental advocate and 1 former NOSB member. The NOSB spends much of its 2 3 discussing inputs for use in organic production, and many people understand organic 4 agriculture only through the lens of what inputs 5 are or what are not allowed to be used on crops 6 7 and as ingredients. Let us not forget that organic is a 8 9 system of agriculture, and it is that system of cultural, biological and mechanical practices that 10 11 promotes ecological balance, recycles nutrients 12 and enhances biodiversity. Ιt is the systems-based approach of organic that provides 13 the numerous environmental, economic and human 14 15 health benefits when compared to non-organic. 16 The allowance of highly soluble nitrogen without restriction would start organic 17 18 down the path of reliance on inputs rather than 19 in systems, resulting dubious benefits and 20 negative consequences. longtime organic farmer 21 As and inspector, I believe the tools for implementing the proposal as written are readily available with much of the information already provided in the Only fertility inputs that are close proposal. to the three-to-one carbon ratio would need to be scrutinized during the annual certification is review. And there abundant information and certifiers aid growers available to in determining the annual nitrogen needs of just about every crop grown.

I have done many inspections where I needed to review the sodium nitrate used and its provision for 20 percent of the nitrogen needs of While it can be cumbersome, it is not the crop. impossible. inspectors Many have developed spreadsheets to do the calculations, speeding up review, especially when there are numerous crops. Just as manufacture in the past of chicken manure pellets quickly learned to supply information to their organic clients on the heat treatment used for their products to be applied on crops for human

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1 consumption without a wait time.

2 The limited fertility amount of 3 suppliers who would be affected by this rule would supply the C-to-N ratio to organic 4 need to operators and certifiers. 5 In short order, these 6 suppliers will quickly learn this organic 7 requirement and the info will be readily available. All inputs must be reviewed within the context 8 9 of the long- and short-term effects on ecological I would have preferred that 10 systems and the OFPA. 11 the annotation would have limited use only in 12 response to an out-of-the-ordinary climactic occurrence that cause the organic system to fail, 13 14 such as unusual cold, extreme wet or 15 conditions. 16 change, With climate growers 17 challenged and this proposal allows for a tool to 18 deal with extreme conditions. This is the main 19 reason I support the proposal, rather than a 20 complete ban. And please refer to my written

comments on numerous other topics.

1	CHAIR POWELL-PALM: Thank you so much,
2	Harriet, for your work, for your participation,
3	we appreciate it. Any questions for Harriet, from
4	the board?
5	All right. I'm going to be a terrible
6	person real quick and delay our break just a minute.
7	And David, if you would give your comments,
8	please, and then we will break.
9	MR. EPSTEIN: Well, I'm truly sorry for
10	delaying everybody's break.
11	CHAIR POWELL-PALM: No worries.
12	MR. EPSTEIN: But I appreciate your
13	accommodation. So, good afternoon. I call your
14	attention to the written comments we submitted
15	regarding the materials and proposals currently
16	under consideration by the board. The Pacific
17	Northwest is the leader in the production of
18	organic apples, pears and cherries, producing 95
19	percent of all the fresh organic apples in the U.S.
20	The NHC supports the relisting of sticky traps
21	and fixed coppers for disease management.

Routine biological monitoring of pest 1 2 insects, allows the grower to know what pests are 3 present, when their present and at what population levels and is the foundation of organic pest 4 5 management. Pest management tools should only be deployed once monitoring knowledge is in hand, to 6 7 determine whether a decision is warranted and needed and to best time the use of that management 8 9 tool or tactic. Use of sticky traps is the principal 10 11 method for establishing when key pests become 12 active in orchard and for initiating biological models that predict egg laying, and when larval 13 emergence occurs, the best time control actions. 14 15 tools, Without these growers are making uninformed decisions on whether and when they 16 17 initiate a control. There are no viable options 18 currently to replace the use of sticky traps. 19 The use of coppers is critically 20 important in organic apple and pear production for the prevention of fire blight, especially since 21

the loss of antibiotics streptomycin and oxytet. 1 Copper is used for fire blight management only 2 3 when fire blight models predict an upcoming fire blight weather event. Coppers are not routinely 4 5 used every year. And this disease can devastate 6 7 In 2017, 22 percent of apple acres and orchard. 65 percent of pear acres in Washington had fire 8 9 blight infections, resulting in \$9 million in loss and hundreds of acres of apples and pears being 10 11 Using this important tool for fire removed. 12 blight management can result in even more 13 catastrophic losses in a weather-conducive year. The decision to delist would leave growers with 14 15 little to protect their trees. This is because fixed copper products average 70 percent efficacy 16 17 when used alone, compared with many other organic 18 alternatives, such as Bacillus subtilis and 19 essential oils, which range from 20 to 40 percent 20 efficacy.

We agree that these materials must be

used in a manner that minimizes the accumulation 1 in the soil and water and decreases harmful effects 2 3 to soil and water biota. However, the monitoring and forecasting systems routinely deploy a low 4 percentage of copper blight an even frequency of 5 copper applications reduces the risk of copper 6 7 buildup in soil and water. Thank you for your time and appreciate being allowed to make 8 those 9 comments. Thank you for your 10 CHAIR POWELL-PALM: 11 We really appreciate it. comments. 12 MR. EPSTEIN: You're welcome. CHAIR POWELL-PALM: Any questions from 13 Thank you very much for 14 the board? All right. 15 your time and comments. Okay. We're going to break for 15 minutes, so let's come back at 55 after 16 17 the hour. 18 So, Beth Rota will be first after the 19 break at 55 after the hour, followed by Lee Frankel 20 and then Jake Evans. All right. See you all in 15 minutes. 2.1

1	(Whereupon, the above-entitled matter
2	went off the record at 1:39 p.m. and resumed at
3	1:55 p.m.)
4	CHAIR POWELL-PALM: Welcome back,
5	everybody. Hope you were able to enjoy some
6	organic snacks. If we're good to start, Beth Rota,
7	you are first up.
8	MS. ROTA: Thanks, Nate. I couldn't
9	figure out how to start my video. But there we
10	go. Good afternoon. My name is Beth Rota, and
11	I am the organic program director at Quality
12	Certification Services. Welcome to the new board
13	members. I hope that we can all meet in person
14	soon. Thank you for taking the time to consider
15	my previous written comments on oversight
16	improvements to deter fraud. Continued trust in
17	the organic seal is very important to QCS as it's
18	avenues to all of us, I am sure.
19	However, I disagree with the assertion
20	that trust comes from transparency in supply chain.
21	I think stakeholders trust the organic seal

because the certification process is robust, not 1 2 because supply chains are transparent. As OFPA 3 and the organic regulations don't allow certifiers to disclose confidential business information, we 4 do not support the listing of crop acreage on the 5 certificate or the public OIT (phonetic). 6 7 I have read the discussion document. I have to wonder if there's lack of confidence 8 9 in certifier oversight. Ιf so, let's together and fill in the gaps with a targeted 10 11 approach. It's important for you to know that one 12 of the most common non-compliances we issue is for insufficient records. 13 Ιn my experience are adequately addressing 14 certifiers gaps 15 also trust the NOP to records. Ι certifier deficiencies through the accreditation 16 17 process. 18 However, sophisticated record-keeping 19 systems, while appearing compliant, can be 20 designed to cover up intentional fraud. This is one of the reasons why a universal bill of lading 21

would not effectively prevent 1 fraud. Most operations do not sell their entire crop to only 2 3 one buyer, thus limiting the buyer's knowledge of total sales. The proposed crop-specific details 4 would also not be applicable beyond the farm sale 5 in lengthy supply chains with mixed lots or for 6 7 processed products. Fortunately, certifiers have access to 8 9 operation's entire production an and sales Certifiers also have skills and tools 10 records. 11 to look for potential fraud, free of competing 12 interests that may exist between organic We conduct mass balance audits at 13 operations. every annual inspection to determine if products 14 15 harvested are handled balanced with product soles. And we also conduct yield analysis to make sure 16 17 crop operations are not selling more than they 18 could reasonably produce. 19 Additional resources from the USDA such 20 as organic-specific yield data by crop and region

would help us scrutinize reported yields for

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potential issues. Certifiers also cross-check 1 2 purchasing sales records between operations to 3 make sure they're not selling more than they disclose to their certifier. The NOP could help 4 certifiers target risky transactions and provide 5 6 support and coordination for cross-checks, especially when multiple certifiers are involved 7 in the supply chain. 8 9 In summary, I hope we put more resources toward yield analysis and cross-checks for risky 10 11 products and supply chains, thus avoiding overly 12 prescriptive record-keeping requirements disclosure of confidential business information. 1.3 Certifiers are committed to a robust oversight 14 of fraud prevention, and should have a seat at the 15 table on any projects aiming towards improvement. 16 17 CHAIR POWELL-PALM: Thank you for your 18 comments, Beth. Any questions from the Board? Seeing none, I have one. Beth, could you speak 19 a little to what all avenues or routes certifiers 20 have to flag fraud? 2.1 Where is the greatest

collection of possible fraud tips coming into 1 certifiers? We as inspectors only have, you know, 2 3 that 4-hour snapshot that we can see on site. there's all these transactions, all these other 4 opportunities to identify fraud. Where do you 5 see, as a certifier, the best spot to catch fraud, 6 7 and to get those tips to investigate further? That's MS. ROTA: 8 а really great question, Sometimes it 9 Nate. comes from A lot of it comes from -- if we're 10 complaints. 11 doing 5 percent of our operations we're doing 12 residue testing on. And that's a really good place to look for potentials of fraud. 13 At the farm level, like I said in my comments, I really think 14 15 doing a yield analysis, that's especially useful where we have a farm that is producing a large 16 volume of any one crop. 17 18 And we do this for a lot of operations 19 that have a big volume of any one particular crop. 20 But, yes, there's a lot of different ways to look for it. You know, sometimes it's just looking at 2.1

1	record-keeping systems that have inconsistencies.
2	But I think that having more regular cross-checks
3	is going to help us identify that as well as really
4	taking a risk-based approach.
5	And I anticipate some of this is going
6	to happen with the implementation of SOE as that
7	we're going to be doing a little more risk
8	assessments of certified operations, and perhaps
9	start doing more things like cross-checks as a
10	regular activity instead of just in response to
11	a complaint investigation.
12	CHAIR POWELL-PALM: Sure. Thank you.
13	Amy has a question as well.
14	MEMBER BRUCH: Yes. Beth, thank you
15	for your time today and your comments, both the
16	written ones and your current oral ones. I have
17	several questions, but I'm just going to limit it
18	to one right now. You mentioned one of the real
19	important things to evaluate is yield analysis.
20	And I was just wondering how best with the
21	information that currently is provided, how do you

1	verify the yields that are maybe communicated?
2	MS. ROTA: How do we verify the yields
3	
4	MEMBER BRUCH: Yes.
5	MS. ROTA: is by looking at we
6	can during an inspection or at any time really get
7	records from the producer to determine how much
8	was harvested, and then look at their field records
9	to verify the acreage for that. There isn't a lot
10	of data out there on what to expect an organic
11	producer to have a yield for. We're just looking
12	at general crop data to compare that. And we
13	expect organic yields to not be higher than what
14	we're seeing in yield reports from the USDA.
15	This isn't organic-specific. It's
16	usually with the National Agricultural Statistics
17	Service or other type of yield information. We're
18	looking at state data, but we're comparing what
19	we're seeing from the farm records with the data
20	that's available, but organic-specific data would
21	be really helpful.

1	MEMBER BRUCH: Thank you.
2	MS. ROTA: Does that answer the
3	question?
4	MEMBER BRUCH: Yes, it does. Do you
5	see value in bidirectional checks potentially?
6	So you have farm records, and then you're looking
7	downstream to then re-verify what farm records
8	show?
9	MS. ROTA: Exactly, exactly. And
10	that's what I was talking about with cross-checks
11	is I think that we can do a yield analysis on the
12	farm that we certify. But we want to really verify
13	that records aren't being undisclosed, right? And
14	we want to cross-check our farm or our handler's
15	records with their buyers records as well. We do
16	that a lot in our own certification activities when
17	we certify multiple entities in the supply chain.
18	It's really easy for us to identify that
19	and do that on our own. Otherwise it takes a lot
20	of coordination between certifiers and that's
21	where I think resources from the NOP, some

Τ	coordination, some support could really help
2	certifiers.
3	They could even be like, you know, the
4	one who's carrying out the cross-check and
5	certifiers provide the data from all over the
6	entities that we certify. And then he could
7	coordinate that process. I think that would go
8	a really long way.
9	MEMBER BRUCH: Great. Thank you,
L 0	Beth. Appreciate it.
L1	CHAIR POWELL-PALM: Kim had a question
L2	as well.
L3	MEMBER HUSEMAN: Hi Beth. And you
L 4	might have already somewhat answered this question
L5	with your previous statement, but is
L 6	cross-checking those yields a standard operating
L7	practice and SOP as certified within your
L 8	organization?
L 9	MS. ROTA: Well
20	MEMBER HUSEMAN: Or is it just ad hoc?
21	And you notice there could be a potential issue?

1	MS. ROTA: Cross-checks and yields are
2	two and yield analysis are two different
3	activities. A yield analysis we've done on the
4	farm. We typically do that on farms where we're
5	looking at, unfortunately not a mass balance, for
6	example, on a at a farm level. We would be
7	looking at that entire production records for a
8	particular crop, looking at the acreage for that
9	crop, and then doing a yield analysis to say, okay,
10	that's a reasonable amount of production, not just
11	based on the acreage, but based on the, you know,
12	how close the crops are planted, and, you know,
13	the level of inputs that they're using, what type
14	of organic system plan they have in place.
15	MEMBER HUSEMAN: And that standard,
16	though, for yes, but that's is that standard
17	for you? Or is that just in ad hoc situations?
18	MS. ROTA: We typically yes, that's
19	part of our mass balance
20	MEMBER HUSEMAN: Okay.
21	MS. ROTA: process at a farm.

1	Cross-checks aren't, because they're outside of
2	just one individual operation, we typically do
3	those as their you know, as part of
4	investigations.
5	MEMBER HUSEMAN: Thank you.
6	CHAIR POWELL-PALM: Thank you for that
7	question, Kim. Javier will be the last one for
8	this one. And I would just remind everyone to keep
9	it to questions. If we have comments or further
10	discussion, please reach out directly to the
11	commenter. So go ahead, Javier.
12	MEMBER ZAMORA: Yes. Thank you, Nate.
13	That's a that's kind of like embraced my heart
14	knowing how big organic is and how so much food
15	is grown organically, but that there isn't data
16	that it's more accurate of what the mass balance
17	as you guys call it with just how much you're
18	producing, doesn't the USDA provide those numbers
19	for you or county on how, you know, let's say, how
20	many trees per acre of strawberries an organic
21	grower produce? Don't you have access to those

things? And I think the record and the acreage, 2 3 the way you guys are doing it is excellent that there is just -- there is no better way of 4 cross-checking than that. But I believe -- I'd 5 like to know if you know any -- how do you go and 6 7 find sources? Or how do you guys do it find sources so that can educate you on what the production could 8 9 be or should be or an average? 10 MS. ROTA: That's a really great 11 question, Javier. Thank you for that. It's mv 12 understanding that the organics, this agricultural census has only been looking at organics for a short 13 period of time. And I don't know how much they're 14 15 collecting, specifically on yields. Where we're looking at yield data is mostly conventional 16 Most of the data that's available 17 agriculture. 18 publicly is for conventional agriculture. 19 And so we have to extrapolate what we 20 might expect from an organic farm. Based on conventional data, I think it would be really 2.1

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1 helpful if there was more data that was specific 2 to what we can expect to see on an organic farm. 3 If we have a bunch of growers that are growing the same type of thing, it's easy for us to keep 4 5 that data for ourselves. I'll give an example. 6 We -- offices in Latin America that produce a lot of bananas. 7 And so internally we have some data on 8 9 what we would expect to see as boxes per week or boxes over the course of a year for that. 10 But that 11 data is less available for organic-specific 12 information. And I see in the comments, there's a link to some surveys from NASS, the National Ag 13 Statistics Service, but more data and more specific 14 15 data would be really, really helpful. 16 All right. CHAIR POWELL-PALM: 17 lied, I will put one more question to you, Beth. 18 So as an inspector, if you're doing a mass balance, 19 would it not be super helpful for an immediate look 20 back to be able to see did the transaction you're inspecting exceed the capacity of the farm that 2.1

supplied the inspected party, which the inspection
is occurring?

So for example, if I'm inspecting a
dairy, and I see they bought a thousand tons of

dairy, and I see they bought a thousand tons of hay, but the certificate which they provide me from the supplier only shows that that farm that they bought it from only has 10 acres certified, does that not provide this wealth of opportunity for inspectors to be citing red flags to -- in their inspection reports to the certifiers to just do a better job of data gathering risk?

MS. ROTA: The issue with that I mentioned in my comments, Nate, is one, you're -when you're doing an inspection, you would then
be reporting on something from another operation,
not the operation that you're inspecting. But,
you know, really, it's not very frequent that -you're just looking at one piece, one transaction,
right? You're not looking at the entirety of that
other farm's sales records. You have one purchase
record from the farm that you're inspecting.

1	It's really rare that you're going to
2	see that farm's entire sales in one transaction.
3	And so it certainly could be useful. But I think
4	that's where we need to have more certifier
5	exchange of information and smart coordination
6	between certifiers to be able to look at those
7	records through cross-checks. And that should be
8	part of the process that I think that would be
9	really great for the NOP to invest resources and
10	staff and personnel to coordinate that.
11	CHAIR POWELL-PALM: I think we'll look
12	forward to following up with you on this, because
13	there's a lot of good work to be done here. So
14	thank you so much for your comments and fielding
15	all of our questions. Really appreciate your
16	time.
17	MS. ROTA: Absolutely. Happy to do
18	so.
19	CHAIR POWELL-PALM: All right. Next
20	up is going to be Lee Frankel, followed by Jake
21	Evans and then Patty Lovera. Lee, if you're on,

1 the floor is yours.

2 MR. FRANKEL: Okay. Great. Good 3 afternoon. My name is Lee Frankel. testifying today on behalf of the Coalition for 4 Ecological Organics. 5 Recovery in CERO is comprised of numerous utility product suppliers, 6 7 businesses, manufacturers, growers, environmentalists, scientists and proponents of 8 9 organic production. Service goals are simple, ensure that reasonable regulations do not impede 10 11 innovation in organic production, allow for the 12 recovery of nutrients from existing waste streams to eliminate negative impacts on environmental and 13 public health, support regenerative soil biology, 14 15 communities strengthen rural by increasing dedicated organic acreage, improve productivity, 16 17 equitable and increase consumer to access 18 organically produced food. 19 What do our members have in common, a 20 real belief and so how it's real return, whereby we must be cycling the nutrients from the waste 21

one production cycle into the next. A real belief that organics must show leadership in reducing the greenhouse gas emissions from our food production A real belief that organic growers can do more to prevent leaching of nutrients into our waterways and airways. real belief that the organic industry must evolve to better preserve carbon stores and wetlands and grasslands by helping farmers improve their productivity land already on the under cultivation.

Our members filter processes to minimize greenhouse qas emissions from t.he traditional composting methods for animal waste, all while abiding by the guidance decision tree for classification of materials and synthetic or non-synthetic in the USDA organic handbook to ensure that we are making non-synthetic products. Material review organizations including OMRI, the Washington State Department CDFA and Agriculture have confirmed our members' processes

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1 to be non-synthetic.

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Recovered nutrients are intended to be used as a complement to other nutrient sources and appropriate field management practices. use is not intended to mimic anhydrous ammonia like in conventional crop production. Instead, the products are intended to be used as a domestic climate-smart nitrogen source as part of the organic grower's systems plan. These supplemental nitrogen sources are derived from agricultural feedstocks or represent a major step in the right direction to minimize the negative impacts of the widespread use of sodium nitrate and other overseas organic fertilizer inputs. It's belief policies our that recommended by the NOSB to the National Organic Program, which should be science-based and promote the goals of OFPA. We remain concerned that the NOSB's technical reports are not thoroughly reviewed and report on scientific data. Several

stakeholders have previously provided

similar

prior meeting. 1 comments in We're greatly 2 concerned that NOSB appears inclined to push 3 organic production into a one-size-fits-all check off the box approach that completely ignores 4 qeographical differences between growing areas 5 6 crops and where inorganic producers and inorganic 7 production journey. 8 We growers respond trust to to 9 insight-specific conditions. We believe that certifiers understand how to 10 review organic 11 systems plans to verify the improvements in soil 12 health that recovered nitrogen products 13 support. We believe these products on replacing organic markets to address the goals of USDA 14 15 climate-smart initiatives, as well as USDA's newly announced initiatives 16 and support innovative 17 American-made fertilizer to give U.S. farmers more 18 choices in the marketplace. Thanks. 19 CHAIR POWELL-PALM: Thank you, Lee. 20 Any questions for Lee from the Board? Amy? 21 MEMBER BRUCH: Sure. Lee, thank you

and oral

2 Really appreciate. My question is in comments. 3 terms of the role of return cycling nutrients. You touched on that briefly just now. 4 another commenter mention about the 5 need for 6 boundaries when we are recycling -- when the 7 organic community is recycling nutrients, such as the example that was brought up as 8 printed 9 I was just curious on your thoughts newspaper. on those types of boundaries, that recycling is 10 11 good, but we also need to be very specific in what 12 we're recycling. Thank you. And in this 13 MR. FRANKEL: case, a proposal before the Board is specifically 14 15 kind of products derived from animal waste, and that are already being used in the compost and other 16 17 So, you know, the question seems to be kind 18 of moving us away from the real issue of, you know,

much for your written comments

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how can we take things that have been considered

organic for the National Organic Program began and

make sure that those products are being used

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1	responsibly.
1	responsibly.

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3	efforts to put a percent limit on it is something
4	that recognizes that there, you know, could be
5	limit how products are used. But I guess getting
6	back to your return question, it seems like this
7	is a product that's already being used, or this
8	is a source that's already being used. I totally
9	understand why we would want to be very excluded.
10	Or that this isn't printed colored paper, this
11	is basic products coming from the livestock
12	production sector where we're saying that we no
13	longer want to have organic beef, we no longer want
14	organic milk, organic eggs and kind of what are
15	we supposed to do with the you know, some of
16	the byproducts of that those production systems.
17	I believe that we should be
18	incorporating them back into the crop production
19	system. And I don't really see this as being
20	something like kind of printed paper.
21	CHAIR POWELL-PALM: I would just

I think that the -- you know, the

MEMBER BRUCH: Lee, thank you for your 1 2 comments. Go ahead, Nate. 3 CHAIR POWELL-PALM: Sorry. I have a quick follow-up. Lee, what do we do with the waste 4 I think that there's a big demand 5 products now? 6 for poultry litter across the board. It seems like 7 organic farmers are using it up. So I'm not quite tracking what you're saying with why would we lose 8 9 milk without eggs, beef and these novel technologies? 10 11 MR. FRANKEL: Yes, I think it was kind 12 of a real specific question saying, you know, should we put some limits on what we return back 13 And, again, maybe like used oil 14 to the earth. 15 drums, you know, maybe you don't want to shut them up and put them in the field. But you're saying 16 17 the growers use those byproducts from, you know, 18 livestock production. So I'm in agreement that should be included in them. 19 And that, you know, 20 I would disagree that we would want to exclude those products from being part of the overall return. 21

1	CHAIR POWELL-PALM: All right. Thank
2	you. Any other questions? Seeing none, thank you
3	for your comments, Lee. Appreciate your time.
4	MR. FRANKEL: Thank you.
5	CHAIR POWELL-PALM: Next up is Jake
6	Evans and we have a presentation.
7	MR. EVANS: Can you all hear me?
8	CHAIR POWELL-PALM: We can. So bear
9	with us just one second and we'll get your
10	presentation.
11	MR. EVANS: Oh, is it not?
12	MS. ARSENAULT: Decided not to use it.
13	Yes. So we're good.
14	MR. EVANS: Okay. Sounds good. All
15	right. Thank you. Good afternoon. My name is
16	Jake Evans. I'm the owner and CEO of True Organic
17	Products. True has been in business for 18 years
18	providing high-quality and compliant organic
19	fertilizers to the production community. True is
20	committed to ensure the USDA organic still remains
21	the gold standard for agricultural production.

True filed the original petition to examine ammonia extracts in 2020. 2 3 First, I would like to thank NOSB and the crops subcommittee for the success of the work 4 done thus far in completing their recommendation 5 on the use of ammonia extract in organic crop 6 It is evident from the stakeholder 7 production. engagement and the newly announced vote 8 9 prohibiting just important how the proper 10 regulation of this category of substance is. 11 The discussions at the fall meeting 12 focused mainly on a process for creating ammonia via concentration of sugar. However, recently at 1.3 True we focused on the stabilization process and 14 15 discovered information that was not fully considered in the TR. The TR focused on the use 16 17 of non-synthetic acid for pH adjustment, but did 18 not consider that an ammonia a change in pH results 19 in a chemical change. 20 Additionally, the technical for the stabilization of ammonia from a non-synthetic 2.1

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source by addition of a non-synthetic acid during
the manufacturing process always produces a
non-synthetic final product. True found that
using either a synthetic or non-synthetic acid to
stabilize ammonia results in a chemical change,
creating a synthetic material under often.

Unfortunately, the flawed information

Unfortunately, the flawed information or TR was used as the basis of the classification of a), this cannot and should not be ignored, as it is a highly consequential or to remedy the situation to as ordered, requested the crop subcommittee to reconsider a's classification decision. To further this process, True will file a petition in the very near future with its scope limited to the classification issues.

True will share a newly developed flowchart describing different subclasses of a category based not only the techniques used to manufacture ammonia, but also to stabilize it. True's updated petition will share that, one, NOSB and NOP have the most up-to-date classification

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Two, NOSB has information needed to 1 analvsis. refine the classification decisions. Three, the prohibition 3 recommended on the use non-synthetic AE (phonetic) is restricted to the 4 types of AE that are in fact non-synthetic. 5 6 Four, want share synthetic we 7 substance that originated from concentration or stripping process are properly identified. 8 And 9 five, will enter the rulemaking process for AE with the most accurate information. 10 In closing, True 11 the crop subcommittee to expedite uraes 12 upcoming petition to reclassify certain subclasses 1.3 of manufacturer A substance to support NOSB discussions. 14 15 We suggest that limited scope TR focus specifically on the chemistry of stabilization of 16 17 We at True believe that these actions will AE. 18 not build -- will not only build on the great work you've already done on AE, but will also conserve 19 the limited resources of NOSB, NOP and the organic 20

community. Thank you.

1	CHAIR POWELL-PALM: Thank you for your
2	comments. Looks like Logan has a question.
3	MEMBER PETREY: Hey, thank you. Jake,
4	so in your statement, saying that there may be
5	something that needs to be followed up in a TR,
6	there were a lot of stakeholders that, you know,
7	stated a lot of things in the TR that seemed to
8	have holes through it and that needed to be looked
9	at again. I know you're specifically wanting a
LO	limited TR.
L1	But I'm curious if that's going to open
L2	it up to a lot of other people who had concerns
L3	that we need to look at if we as a board are saying,
L 4	you know what, the TR is not sufficient, we need
L5	to look through. So I'm wondering if other people
L 6	are going to, you know, say, well, we disagree with
L 7	other parts of the TR and start adding in a lot
L 8	of other petitions against that topic?
L 9	MR. EVANS: Yes. I don't know what
20	other people are going to do. I know when it comes
21	to the specific area of the TR, it's a pretty

science-based very science-based argument. So
I can't control what other people think. I know,
3 based on the 13 to 1 vote and the broad stakeholder
4 community, I think there was a lot of compasses.
5 In this particular, we're talking about Motion
6 Number 1, and the classification issue.
7 MEMBER PETREY: All right. Okay.
8 And I see with, you know, liquid fish products,
9 things like that, I mean, we're adding an acid to
it and stabilize it as well in it which you may
have products that do that and they're underneath
the synthetic use of the 205.601 for that?
MR. EVANS: Well, that's yes, that's
exactly what we're talking about, Logan, is, it's
not a synthetic. It's not an acid to stabilize
for microbial growth. It's an acid that causes
chemical change. So it's much a difference, but
that's why the TR I think would be useful.
19 MEMBER PETREY: So sure. I mean,
even if the intention is different, do you think
21 that there's any change in liquid fish in the

1	ammonia or anything in it when you add an acid to
2	it? I know the intention is to prevent microbial
3	growth, but do you think anything has changed
4	chemically in that too?
5	MR. EVANS: No. No, I think, it's
6	when it comes to the ammonium what we've seen, it's
7	a chemical change. We're not talking about
8	microbial degradation pH for microbial
9	MEMBER PETREY: Right. Yes, I just
10	didn't know if there was any ammonia, you know
11	MR. EVANS: Yes
12	MEMBER PETREY: in the liquid fish
13	products that would be subject to the chemical
14	change?
15	MR. EVANS: Liquid fish is actually a
16	proof synthetic, because they have a synthetic
17	acid.
18	MEMBER PETREY: Correct.
19	MR. EVANS: Yes.
20	MEMBER PETREY: That's right. Yes.
21	So I was just clarifying, yes.

1	MR. EVANS: But I mean, that's why it
2	the TR would be great look, minimize TR to look
3	at that exact issue.
4	MEMBER PETREY: Okay. Thank you,
5	Jake.
6	CHAIR POWELL-PALM: Thank you for your
7	comments, Jake. Moving on, we've got Patty Lovera
8	next, John Foster after that, followed up by
9	Margaret Scoles. Patty?
10	MS. LOVERA: Okay. Hi, everybody.
11	My name is Patty Lovera. I'm the policy director
12	for Organic Farmers Association. I'm going to
13	cover a couple of topics and Kate Mendenhall, our
14	director is going to cover a couple more in a little
15	while.
16	So the first one on my list is the
17	discussion document on traceability
18	infrastructure. This is a hot topic for our
19	members and it's been a high priority since OFA
20	began. And OFA does support including acreage per
21	crop on the organic certificate. But one issue

that our folks flagged was needing to make sure it works for different types of operations so it doesn't create a burden for some farmers that maybe do things a little differently.

> example that So the came up is, producers who grow a lot of varieties every year on a fairly small parcel, might need a different way to estimate acreage, if they're doing lots of things on small acreage so that doesn't become a burden to put on the certificate. And then we also heard concerns from folks about using succession planting and if you're going to run into issues about what you're doing per year, not lining up with your acreage, if you're doing things on pretty fast cycles.

> But they wanted to do this, but just flag that making sure it works for folks who farm that way. Our folks also supported including acres per crop on the certificate as well as in making it public-facing in the organic integrity database. A lot of our farmers are working with

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certifiers who already do this, and they really 1 saw a benefit in standardizing that. 2 Across all 3 of organic, we did hear that some large food processors require farmers to sign nondisclosure 4 agreements that forbid them from disclosing this 5 6 type of information. 7 So if NOP required of everyone, you wouldn't have buyers asking some, you know, putting 8 9 it in some contracts. If that was part of the organic standards, everybody would have to do it. 10 11 And then we wouldn't have some buyers asking for 12 this nondisclosure for people thought that was the way to deal with that problem. And then on the 13 universal bill of lading, we had really a lot of 14 15 enthusiasm from grain growers. And then the same idea caused stress for other types of growers who 16 17 have different types of transactions like folks 18 who grow leafy greens who have like very frequent 19 transactions all of the time. 20 So we suggest that maybe there's -- it's worth thinking about common forms or universal 2.1

forms per sector, right? And there's a different paperwork need for the types of transactions if you're doing bulk shipment of grain versus, you know, dairy versus vegetables, things like that. And this also seems like an opportunity as we are developing new forms to be very deliberate, thinking about making them accessible for non-English speakers like starting from the beginning with the idea that there are language issues we could address so that organic is open to everybody, especially folks who are new to organic, that this doesn't have to be a barrier to being organic. quickly on then the excluded methods, we support finishing these definitions, getting them done, so that we can be as current as we can be. And we agree with the addition of cell fusion and protoplast fusion as outlined, but

just like we heard from Jaydee, I think that

recombinant DNA should be changed in vitro nucleic

acid technologies so that we get more comprehensive

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and we can line up with as international standards 1 like Codex. Thanks. 2 3 CHAIR POWELL-PALM: Thank you for your Based on your surveys, do you 4 comments, Patty. think -- I believe it was a question posed to Julia 5 6 Barton of OFA that listing mixed vegetables, say for those very sort of micro plots of rotational 7 vegetables, would that sort of fall and thus raise 8 9 the concerns of your constituents? 10 MS. LOVERA: I think so. They Yes. 11 just didn't want to have to do -- you people were 12 thinking about small operations that do a lot of 13 things in less than an acre and how I do that math. 14 And this comes up for conservation programs when 15 people deal with NRCS like I'm translating, you know, feet into acres, because I have -- you know, 16 17 I do different beds and I do a lot of things. 18 think if there was an option to do mixed Ι 19 vegetables or there was an option to say less than 20 an acre or something like that, it just doesn't become this like mathematical exercise that shifts 2.1

1	especially if you do a lot of things in a season,
2	because you're doing succession planting it didn't
3	we didn't want that to become a deterrent to
4	farming that way if that's how you farm.
5	CHAIR POWELL-PALM: All right. Any
6	other questions? Yes, Kim.
7	MEMBER HUSEMAN: Thank you for your
8	comments, Patty. Out of curiosity, were specific
9	languages for subcommittee would be Spanish, but
10	were other languages mentioned that would be
11	helpful when looking at presenting BOL (phonetic)
12	information, you know, with multiple language
13	sources?
14	MS. LOVERA: I mean, Spanish is the one
15	that comes to mind. I think in some parts of the
16	country Hmong would be high on the list. But I
17	think that's also something as you move forward
18	with developments we should ask, you know, farming
19	groups on the ground who and especially if we
20	see, you know and we're having a conversation
21	about transition and getting close to transition

1	like what communities are out there doing that work
2	what, you know, grassroots organizations are
3	trying to train people who are in their
4	communities.
5	And I think if we did some quick asking
6	around we could come up with, you know, the top
7	needs, but the two that we hear the most about are
8	Spanish and Hmong. But I'm sure in other parts
9	of the country there's other needs.
10	MEMBER HUSEMAN: Thank you.
11	CHAIR POWELL-PALM: Great question,
12	Kim.
13	MS. LOVERA: But this also seems just
14	baking in from the beginning, so we're not after
15	the fact saying, oh, how are we going to translate
16	these, like let's think about it as we design new
17	forms.
18	CHAIR POWELL-PALM: Thank you very
19	much for your comments, Patty. Really appreciate
20	your work. Next up will be John Foster, followed
21	by Margaret Scoles and then Kate Mendenhall.

John, floor is yours. Thank you, sir. 2 MR. FOSTER: Thanks 3 for the opportunity to participate in this process. It's one of my favorite times of the year. 4 thanks especially to the NOP staff and Board 5 members for the ongoing commitment. 6 I know it's 7 not a small deal, but without you and the organic community together, the positive change wouldn't 8 9 be reachable. So thank you. My name is John Foster, I'm with Wolf 10 11 & Associates, a consulting firm specializing in 12 growing organics with integrity is probably a good as any summary. I'd like to especially welcome 1.3 the new Board members on this long strange trip 14 you're about to take. And I had five points I might 15 just throw out to -- for suggestions. 16 Take the time to think about everything 17 18 really critically, it's important. Consider everything with an open mind, favor evidence over 19 opinion, and do what you can to get more ground 20 in organic production. That's my opinion. 2.1

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slide appear is one of just two I have. I'd like
to also just ask you to refer to a more detailed
written comments from which these two short topics
are pulled.

And these two are -liked are Ι aspirational. So think about what could be, not necessarily what is. Around 605, we're pretty big at advocating for in the interest of encouraging more organic production by applying commercial availability to all items on 605. And we've had some experience, some evidence, a lot of confidence that there's existing opportunities for development of more organic -- certified organic ingredients and inputs.

But that is going to require commercial demand. There are several items on both the synthetic and the non-synthetic portions of 605 that I think could be produced using certified organic inputs and compliant processes. And we definitely want to support a mechanism to favor these organic analogues over other inputs that are

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1 now on 605.

2	Second is another kind of novel concept
3	I've been fooling around with, that is the
4	commercial availability registry. I'd like
5	we'd like to advocate that ACAs provide data to
6	NOP listing the analysis and allowances they've
7	made after confirming lack of commercial
8	availability of inputs or ingredients. And this
9	could apply for example, everything between seeds
10	and flavors, everything in between. But if that
11	aggregated and anonymized data could then be made
12	public, then producers, suppliers, manufacturers
13	would have that data that would incentivize
14	research, incentivize development and
15	commercialization of certified organic analogues.
16	I believe this will provide good new
17	markets for organic crops and more options for
18	manufacturers to go organic. Certainly, both of
19	these options have you know, they're
20	challenging, they're novel, but I think the I
21	think any challenges on certification or problems

1	that come up can be met. And if you will allow
2	me I believe that the organic juice would be worth
3	the squeeze. Thanks very much.
4	CHAIR POWELL-PALM: Thank you very
5	much, John. Kyla?
6	MEMBER SMITH: Hi John. Thank you for
7	your comments.
8	MR. FOSTER: Hi Kyla.
9	MEMBER SMITH: I was wondering if you
10	had any thoughts on who might be the owner of said
11	commercial availability registry, because I
12	believe at one point in time and not the too far
13	distant past was a registry and it sort of fell
14	by the wayside because of upkeep. So if you had
15	any thoughts on that, I'd love to hear them.
16	MR. FOSTER: Yes. This is where I
17	would love to see some of the newfound funding of
18	NOP pick it and make it institutionalize it.
19	I think that past experience, and that wasn't the
20	first try that was there were several tries
21	before that. And you're right. They none of

1	them lasted. I feel like outside of an
2	institutionalized owner of it, it the same thing
3	will likely happen.
4	I also feel like the it's appropriate
5	because this commercial availability clause is
6	part of the regulation. Like it's part and parcel
7	of the regulation and it ought to be owned by public
8	really through in my opinion governmental process.
9	CHAIR POWELL-PALM: All right. Well,
LO	thank you both. Thank you for that question, Kyla.
L1	I felt like I could tack on a few more questions
L2	about how do we create all these registries
L3	necessary for many things, but we'll talk offline,
L 4	John, to brainstorm more.
L5	MR. FOSTER: You know where to find me.
L 6	Yes.
L7	CHAIR POWELL-PALM: All right. Thank
L8	you for your comments. Next up is Margaret Scoles,
L 9	then Kate Mendenhall, followed by Rodgers Koech.
20	Margaret
21	MS. ARSENAULT: I'm not seeing

Margaret on the line with us. Haven't been able 1 to find her. 3 CHAIR POWELL-PALM: Okav. We'll ao on, Margaret, if you're there. Please let us know 4 and we'll fit you in as we move through. 5 6 up, Kate Mendenhall. 7 MS. MENDENHALL: Great. Thank vou NOSB members for the opportunity to speak before 8 9 you today. Welcome to the new members. My name is Kate Mendenhall, and I'm the executive director 10 11 of the Organic Farmers Association. 12 OFA was created to be a strong national voice and advocate for domestic certified organic 13 Today, it will be addressing highly 14 farmers. 15 fertilizers, human capital soluble and climate-smart agriculture. OFA strongly supports 16 17 the concept of feeding the soil, not the plant. 18 We support limiting the use of highly soluble 19 nutrients for use in organic production, because 20 such use is incompatible with OFPA and good soil health practices. 2.1

Our farmers have voted to prohibit ammonia extract and sodium nitrate. OFA strongly supports human capital management efforts to better support the work of the Board and its is members. Ιt vital the NOSB be fully representative of the organic community. and other members of the organic community who are self-employed often have large out-of-pocket expenses to cover their time spent fulfilling NOSB responsibilities.

support the NOP hiring research assistants to support Board member-driven research needs restricted to summarizing literature reviews, technical reports and summaries of public Managing conflict of interest comments. confidentiality commitments and then sharing that assistants have organic knowledge these essential. We also encourage the NOP to consider expanding the allowable expenses for Board members to cover on-farm replacement labor, childcare, et cetera so that self-employed are not facing

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to the NOSB. 3 In response to the NOP memo on February 23rd requesting that the NOSB facilitate public 4 discussion and "explore how organic can advance 5 with climate-smart 6 in tandem agriculture support our planet and our farmers," I would like 7 to emphasize the contradiction that allowing 8 9 certified organic hydroponic production poses to this effort. 10 The NOP asks the NOSB to "help reinforce 11 12 and capture the connections between climate-smart 13 agriculture and what many certified organic farmers are already doing." We support this and 14 15 we highlight that organic soil farming sequesters carbon and hydroponic farming does not yet all the 16 questions NOP asks around climate-smart farming 17 18 and organic assumes soil-based production systems. 19 Avoiding the issue of organic hydro is 20 creating a huge mess in the marketplace that contradicts the value of organic. 2.1 Organic

economic hardship by volunteering their expertise

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production 1 hydroponic is undefined, lack It's growing at a rapid pace. 2 standards. The 3 NOSB recommendations on greenhouse production are now a decade outdated as technology in this 4 industry has changed dramatically. The NOSB has 5 6 tools to restore organics place as a climate-smart 7 leader and must use its authority to do so by addressing greenhouse production and hydroponics. 8 9 Thank you. 10 CHAIR POWELL-PALM: Thank you so much 11 for your comments, Kate. Kyla Smith has 12 auestion. 13 MEMBER SMITH: Okay. Thank you. 14 wanted to ask you about the statement in your 15 written comments about highly soluble nitrogen fertilizers, where it 16 was stated that 17 committee and your members expressed concern over 18 the ability for certifiers and inspectors and 19 producers to be able to monitor this. And while 20 they do in general oppose, you know, this concept and so would be in support of the prohibition. 2.1

So how are you balancing that? 1 How are you providing support what things can NOSB or NOP due 2 3 to bridge that gap between this need and concern with where we are with the prohibition that people 4 5 are expressing an interest for? 6 MS. MENDENHALL: Yes, sure. I mean, 7 I think that our policy committee put their effort into a broader policy. So, I don't have -- you 8 9 know, aside from the 20 percent, I do think that that's a concern that hasn't been expressed before. 10 11 I think farmers are feeling a concern about overly 12 burdened paperwork and record-keeping like we heard Javier describe earlier, I think that's a 13 14 concern. 15 I think right now is a tricky time for There's a lot of fertilizer angst at the 16 farmers. 17 moment with high prices of synthetic fertilizer 18 driving conventional farmers to use our typical 19 organic fertilizer sources. So it's a little bit of a stressful fertilizer time for farmers at the 20 moment. And I think that sort of put that in the 2.1

2 to not pass this specific policy. 3 So we actually are meeting our -- with our policy committee on Thursday and I'm hoping 4 to tease out a little bit more understanding about 5 6 why this 3 to 1 proposal did not pass our original policy process so that I can provide the Board with 7 a little bit more understanding of if it was 8 particularly tied to this proposal, or if it was 9 in the broader context of just wanting a broader 10 11 proposal that our committee wanted to support, or 12 if it was just a tiredness about -- talking about, you know, the state of fertilizer at the moment. 13 So I apologize I can't give you more 14 15 specifics right now, but I'm hoping to do so. I'll put something in the chat or e-mail that you're 16 here to share with the Board if I can do so on 17 18 Thursday. 19 CHAIR POWELL-PALM: All right. Thank 20 you for your comments, Kate. Next up, we have --I think we said Rodger Koech is not on the Zoom 2.1

context of this conversation could have driven us

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1	that we're seeing. So go to Mark Kastel and then
2	followed by Ben Silverman and Phil LaRocca. Mark,
3	the floor is yours.
4	MR. KASTEL: Thank you.
5	CHAIR POWELL-PALM: And just a second
6	while we reset the timer. There we go. All right.
7	MR. KASTEL: I prefer the Harold Austin
8	routine. My entire presentation will be my
9	introduction. Thank you, Mr. Chairman. My name
10	is Mark Kastel. I'm the executive director of
11	OrganicEye. For all of you who truly care about
12	the integrity of the organic label, I'm here to
13	alert you that the certification process which
14	we've been talking about, as it's constituted today
15	is more show than substance. Ineffective
16	busywork, honest farmers and business people and
17	the American taxpayers are investing tens of
18	millions of dollars per year in a system based on
19	annual inspections.
20	And that system is not catching the
21	major stop loss. The annual inspections worked

when I was a certified agricultural producer in the 1980s as family scale farmers had their heart in the organic movement, and were either direct marketers or had personal relationships with their wholesale buyers. But with over a \$60 billion in commerce today, that system has become a hoax.

As one of the country's preeminent industry watchdogs who has worked with the USDA, the Justice Department, the FBI, on the industry's largest cases, I can tell you almost none of them, almost none of the major fraud investigations have started with annual inspections. Most have come from current or former employees or competitors ratting out the perpetrators.

We need to fundamentally reallocate certification funding to more effectively catch these offenders as an alternative to putting honest farmers and handlers through the rear every single year. An alternative would be to schedule full inspections and audits conducted every 5 years by very experienced individuals with backgrounds in

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production agriculture and forensic accounting,

supplemented by liberal unannounced inspections

and testings.

Testina right now, neophytes, sometimes fresh out of the university, many without any experience or background in production ag, processing or accounting are going toe-to-toe with experienced fraudsters. These agriculturalists are having their lunch every day. As envisioned, reallocation of this resources should be revenue-neutral annual inspections only when they are warranted, very comprehensive reviews once every 5 years punctuated by ample unannounced inspections, spot audits, and abundance testing.

The multimillion dollar domestic and international frauds that become public are an embarrassment. But do any of you think that we are doing anything more than capturing the tip of the iceberg? I guarantee you, and I was just working with the FBI on a case last week, that there

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are problems out there, a multiplicity of problems 1 that will undermine this industry and maybe scuttle 2 3 it at some point. If organic stakeholders from farming 4 communities, processors, marketers, or the USDA 5 officials would like to discuss these options 6 7 further, I would really encourage you to contact Thank you very much. us at OrganicEye. 8 9 CHAIR POWELL-PALM: Thank you for your 10 Logan has a question. comments. 11 MEMBER PETREY: Hi, thank you. I love 12 the idea of really specialized people. Ag is very complex and there's a lot of ways I guess people 13 can get around. Question on those 5-year audits, 14 15 you know, unexpected audits. Will you be prepared that pays for those audits. I know that a lot of 16 times small farms, I'm sure any farm, it can be 17 18 very costly to get inspectors over and with that 19 amount of time. And that specialization, I would 20 imagine would cost more. Who do you expect that would pay for that? 2.1

1	MR. KASTEL: Well, again, I'm okay,
2 th	his is back of the envelope estimates. This
3 sł	hould be revenue-neutral. We're going to
4 e.	liminate 4 of the 5 years of annual inspections
5 ar	nd concentrate those resources on doing it once.
6 5	So, I just get too many reports of what farmers
7 a:	re acquiring drive-by certifications. The
8 do	ocuments that are the key are not being analyzed.
9	I had a conversation with the head
10 ma	arketer of the one of the grain cooperative
11	- organic grain cooperates in the country. And
12 we	e were commiserating saying, look, this is all
13 ak	bout creative writing. People are reviewing
14 do	ocuments that aren't really qualified. And we
15 we	ere saying, look, we've been doing this for
16 de	ecades, if we wanted to cheat, how hard would it
17 be	e? And he was saying it would be easy.
18	And, you know, that might be an
19 07	versimplification. But part of problem is that
20 th	here's a economic disincentive for certifiers to
21 f:	ind problems. If there is a world of trouble for

1	the certifiers and a world of expense, if they
2	it's like imagine the policeman out on the beat,
3	and in a half-an-hour, he's going to punch out,
4	and his wife's going to have a hot dinner for him
5	or her husband on the table. And then they find
6	a real problem and they're going to have to write
7	it up, you know, mediation, potential for
8	litigation, engaging with the USDA. I'm not
9	saying they're not doing it when they find it.
10	But there's a disincentive. And right
11	now we have people that aren't seasoned and
12	experienced doing quick work. They've had some
13	rudimentary training. Their heart's in the right
14	place, but we are missing the big picture. And
15	it's possible to capture it. But right now, we're
16	finding it after the fact.
17	I will remind you that the USDA said
18	that everything was fine and buttoned down for
19	years. And then we 75 percent of the Black Sea
20	region, importers lost their certification after
21	the Washington Post, who I worked with, have

1	spotlighted the problem. You know, after the fact
2	doesn't cut it. We've got to be more proactive.
3	MEMBER PETREY: Thank you.
4	CHAIR POWELL-PALM: Thank you, Mark.
5	Appreciate your work. Next up we have oh, yes.
6	Oh, yes, great. Next up we have Ben Silverman
7	followed by Phillip LaRocca and then Jane Sooby.
8	Ben, the floor is yours.
9	MR. SILVERMAN: All right. Thank you,
10	everyone, for the opportunity to comment today.
11	My name is Ben Silverman, co-founder and chief
12	technology officer at Upward Farms located in
13	Brooklyn. We're an aquaponic vertical farming
14	company growing leafy greens and fish with the
15	highest ecology standards and quality standards,
16	so everyone can nourish their body, family and
17	planet.
18	We've been in business over 9 years,
19	and we look forward to continued growth as we set
20	out to build our next farm in Pennsylvania. We
21	support the prop subcommittee recommendation to

add carbon dioxide at section 205.601 A&J as

petitioned. Our experience has been that the use

of current alternatives such as the use of a sulfur

burner to produce sulfuric acid to treat water has

negative implications, both for the operators and

the environment.

Burning sulfur produces sulfur dioxide, but not all the sulfur dioxide dissipates into the water, rather some is emitted into the air. That sulfur dioxide is toxic if inhaled, contributes to acid rain if emitted to the atmosphere. And in order to use those sulfur burners, we have to take significant steps to reduce those emissions as much as possible to avoid danger to the operators and the environment.

Additionally, the sulfur pellets are highly flammable and require special handling and storage. All in all, it's a very expensive operation to do it right, ensure that we don't create any environmental health and safety hazards. While there are some industries that

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generate non-synthetic carbon dioxide as a byproduct of biological processes, there's currently inadequate infrastructure to support its use.

There have been small-scale carbon dioxide recapture systems, but nothing has been developed for our scale, and thus we need to contract a custom design and build. Additionally, it's difficult to find a partner that we'd be able to supply the volume and consistency we require in the local market, which would -- also has necessitated refrigerated trucking from great distances to meet our needs and have its own footprint attached to it.

We're committed to locating non-synthetic sources. However, until synthetic sources are available -- sorry, until sufficient sources are available, synthetic sources are a necessity. For these reasons, we support this petition and urge the Board to follow the prop subcommittee proposal and vote to add carbon

dioxide at 205.601 A&J. Thank you again for the 1 2 opportunity to provide these comments and your 3 consideration. Thank you for your 4 CHAIR POWELL-PALM: Any questions for Ben? All right, Ben. 5 comments. 6 Thank you so much. I appreciate your time. up, we have Phil LaRocca followed by Jane Sooby 7 and then Emily Musgrave. 8 9 MR. LaROCCA: Well, I'm in California, so I'm going to start off by saying good morning 10 11 even though it's late morning. Anyway, my name 12 is Phil LaRocca. I'm the owner and winemaker at 13 LaRocca Vineyards. I'm in the process of passing the baton to the next generation. 14 I also sit on 15 the California Organic Product Advisory board. And I am the chairman of the board for CCOF. 16 Τ was first certified in 1975, so I've been around 17 18 the organic community for quite some time. 19 I want to comment on a few inputs that 20 are being looked at that have been around as long The first one I want to address is 2.1 as I have.

bentonite. Bentonite is a colonial clay that we use in the wine industry to subtract excess proteins out of the wine, in particular white wines and roses. There are synthetic comparisons to this, but even commercial wineries will use the bentonite, because it is more efficient, little more of a hassle to prep, but definitely more efficient.

The second input I want to address is diatomaceous earth, which has been around from the first meetings when a bunch of guys like myself got together and called ourselves organic farms because we didn't use any synthetic controls in growing our crops. Diatomaceous earth has been around as a organic pesticide and has been a great tool for the organic farmer. And the processing in the early days, we actually used diatomaceous earth as part of a filtration product process.

We do not use it anymore, but there are several wineries that still plate -- plate filter and diatomaceous earth is essential to that form

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Tartaric acid, again, been around 1 of operation. Tartaric acid is a byproduct 2 forever. 3 winemaking. And for us as an organic winery, it is a tool that we use with other methods. 4 a tool that we use to help control our pH. 5 by controlling our pH with the tartaric acid 6 7 affords us the opportunity where we don't have to use any synthetic preservatives in our wine. 8 9 The last one I want to talk about is 10 copper. Again, copper has got some restrictions 11 as it should be, but it is a tool that grape growers 12 use, stone fruit growers totally dependent on it 13 and ammo growers as well. This was one of the very 14 earliest tools, in the early days I grew apples 15 and some peaches. This was one of the earliest organic tools that we had to fight curly leaf. 16 17 We also use copper as a form of not having to use 18 water for frost protection. 19 With that said, I'm going to end by 20 saying I'm very grateful that the NOP finally put into effect the origin of livestock. 2.1 It's

1	unfortunate, and I had to emphasize the word
2	finally. I'm hoping that in the future when the
3	organic community is so together to support an
4	issue that it can be act on quite a bit sooner.
5	Thank you for your time.
6	CHAIR POWELL-PALM: Thank you very
7	much for your comments, Phillip. Any questions
8	from the Board? All right, again, thank you,
9	Phillip. Next up, we have Jane Sooby followed by
10	Emily Musgrave. And then, can it be apologies,
11	I'm getting this right, Gullatte. All right,
12	Jane, the floor is yours.
13	MS. SOOBY: Thank you. Hello, I'm
14	Jane Sooby with California Certified Organic
15	Farmers, CCOF. First of all, I'd like to welcome
16	new members to the NOSB. It's so good to see you
17	here. I'd like to thank all NOSB members as well
18	as NOP staff for their dedication to this
19	democratic process of continual organic
20	improvement.
21	As an accredited certification agency,

CCOF's guiding principle and comments to NOSB and 1 NOP is advocating for standards and procedures that 2 3 contribute to consistent decision-making between certifiers. Consistency is a crucial cornerstone 4 of organic integrity. Consistency arises from 5 clear and specific rules that have little room for 6 7 interpretation, and thus lead to consistent enforcement by certifiers. 8

The dictionary definition of consistent is agreeing, in harmony, in accord. Here are some examples where clear guidance will lead to greater consistency. Rulemaking for pending standards. Examples of organic products that are commonly certified in the absence of federal rulemaking include honey, mushrooms and food. Organic certifiers pet are offering certification of these products using standards they've developed that are consistent with the NOP regulations, but without rulemaking there may be inconsistency between certifier requirements.

21 The materials subcommittee in their

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research priorities discussion document included the CCOF-suggested priority to research the creation of an overarching ingredient review process for ancillaries, incidentals, and inerts used in organic processing and handling. This is likely to be a challenging task, but the reward will be greater clarity in reviewing petitioned materials, and will standardize decisions made by certifiers, many of whom have developed their own approaches to evaluating these materials.

And an example of clear direction is the Compliance Accreditation and Certification Subcommittee's discussion document on oversight improvements to deter fraud, where they set forth specific elements that should be included in a proposed universal bill of lading. This level of quidance helps to ensure consistency between certifiers developing auditing in and such We understand that some of these documents. examples require action by the NOP and are not currently in front of the NOSB. But I hope that

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Τ	they inform you as you do your important work.
2	Thank you.
3	CHAIR POWELL-PALM: Thank you so much
4	for your comments. Any questions from the Board?
5	All right, again, appreciate your time today,
6	Jane. Next up, we have Emily Musgrave, followed
7	by Kennedy Gullatte and then Robert Rankin.
8	Emily, the floor is yours. Okay. There we go.
9	MS. MUSGRAVE: Good morning. Can you
LO	hear me okay?
L1	CHAIR POWELL-PALM: Yes.
L2	MS. ARSENAULT: Actually, Emily,
L3	you're a little faint. Can you get closer to the
L 4	mic?
L 5	MS. MUSGRAVE: Is that better?
L 6	MS. ARSENAULT: Better, thanks.
L7	MS. MUSGRAVE: Okay. Good morning.
L 8	My name is Emily Musgrave. I'm the organic
L 9	regulatory manager at Driscoll's. I would like
20	to thank the NOSB for their commitment to protect
21	the integrity of the organic program and uphold

the vital regulatory processes of the NOP. 1 My comments focus on the continued 2 3 allowance of the following materials. Elemental sulfur, biodegradable biobased 4 mulch polyoxin 5 D zinc salt, humic acid. and Driscoll's 6 micronutrients. supports the 7 continued listing of elemental sulfur for use in organic production on the national list. 8 9 Elemental sulfur is critical а 10 amendment for organic strawberry growers 11 decrease pH and alkaline soils and control powdery 12 mildew. Organic strawberry growers commonly use both dusting sulfur and wettable sulfur in rotation 1.3 with each other. Our growers are aware they must 14 15 follow all label instructions and dusting sulfur also needs special attention to wind patterns to 16 17 prevent drift. 18 Organic strawberry growers rely 19 heavily on dusting sulfur and do not believe that the sole use of wettable sulfur could be a viable 20 alternative for control of powdery mildew in 2.1

organic production. Growers have found the two
formulations to have different efficacies and
rotating the products limits plant stress, and
reduces the risk of phytotoxicity.

Dusting sulfur is preferred wettable sulfur, particularly when environmental pressure of powdery mildew is high, because it gets during application. thorough coverage more Driscoll's supports the continued listing of biodegradable biobased mulch films on the national Driscoll's advocates for keeping BVMS on the national list as there are still not many widely available ways to recycle this type of field plastic.

Our growers have long advocated for a BVMS that they can use on organic branches instead of taking their polyethylene plastic mulch to the landfill. Driscoll's supports the continued re-listing of polyoxin D zinc salt on the national list, as it is an extremely effective tool to control botrytis on strawberry, blueberry, and

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raspberry crops. It is one of the most effective 1 tools our berry growers have against controlling 2 3 botrytis in organic systems. And it would be a huge blow to organic growers to have this material 4 removed from their toolbox. 5 Driscoll's supports the re-listing of 6 humic acids on the national list as this is one 7 of the most widely used soil-applied or fully 8 applied products used by our growers across all 9 Driscoll's advocates for 10 berry types. t.he 11 re-listing of all micronutrient products up for the national 12 re-review on list. A 1 1 the micronutrient products up for sunset review are 13 important tools for organic growers, especially 14 15 as plant and soil amendments are a critical tool for producing viable organic plants. 16 I thank the National Organic Standards 17 18 Board for your service as always, and for your 19 consideration of my comments. 20 CHAIR POWELL-PALM: And thank you for your comments and your time today. Any questions 21

1	for Emily from the Board? All right. Thank you
2	so much, Emily. Next up, we have Kennedy Gullatte
3	from NOC, followed by Robert Rankin, and then Kiki
4	Hubbard. And I apologize, am I getting your last
5	name right?
6	MS. GULLATTE: No, you actually are.
7	Thank you.
8	CHAIR POWELL-PALM: Okay. Good,
9	good. Thank you.
10	MS. GULLATTE: All right. Good
11	afternoon. I'm Kennedy Gullatte, and I'm speaking
12	on behalf of the National Organic Coalition,
13	minority opinions if NOSB's subcommittee decisions
14	and public materials. NOC urges NOSB committees
15	to include minority opinions in their published
16	materials. The omission of minority opinions does
17	disservice to the democratic process and all the
18	expertise that comes to this Board.
19	Minority views inform the
20	deliberations of the whole board, reflect ranges
21	of views of all state coders and are common to the

1	FACA boards. The lack of statement of minority
2	opinions stifles informed decision-making.
3	Accuracy of representation matters. Accuracy of
4	representation matters. When NOSB members
5	present a summary of a public comment received on
6	a material petition or other issue, sometimes
7	comments received on the materials are
8	misinterpreted by the lead.
9	The lead will state that the comments
10	are in favor of re-listing when in fact many of
11	the comments may have come from certifiers who
12	merely provided the number of operations that lists
13	the material on the organic system's plan. This
14	number may not be an accurate representation of
15	the numbers of operations that are actually using
16	the material. Since the number does not
17	accurately reflect the actual use, this data cannot
18	be properly used. We want to strive to improve
19	accuracy going forward.
20	Global organic movement consistency,
21	just as the U.S. Organic Regulatory System benefits

1	from consistency of interpretation application,
2	the international organic movement benefits from
3	consistency as well. There are a few instances
4	where the U.S. system conflicts with our trade
5	partners, organic neighbors, IFOAM
6	interpretations, and codex regulations. Where
7	possible, we should bring U.S. instances and
8	alignment with the global organic movement.
9	Continuous improvement as a community value, not
10	values continuous improvement because we
11	understand that organic agriculture is based on
12	an understanding of ecology and complex systems.
13	We did not see silver bullets, but
14	improve ways of working with nature. Continuous
15	improvement is visible in the innovative
16	approaches we have seen developed in organic
17	systems, such as pasteurized poultry and organic
18	no-till. It's most visible on offer in the sunset
19	provision which provides for the periodic
20	reexamination of materials used in organic.
21	Organic agriculture is no longer small

and it is global. Because of this growth, the USDA 1 must be willing to engage in rulemaking and 2 3 progress towards organic principles. must support continuous improvement by educating 4 the Office of Management and Budget and others to 5 6 make frequent regulatory updates as organic grows 7 toward achieving our goal of agro systems that are ecologically social, 8 and economically 9 sustainable. Thank you. 10 CHAIR POWELL-PALM: Thank you very 11 much for your comments. Any questions from the 12 Board? I have a quick question. You were saying that it might be misrepresentative of actual 1.3 numbers when we receive from certifiers the survey 14 15 of operations, who use a given substance. Do you have a recommendation for how better to gather that 16 17 information to inform our understanding of its use 18 in the industry? 19 Yes, thank you for that MS. GULLATTE: 20 No, that's something that I think I need auestion. to discuss with my organic coalition because I 2.1

1	think they know a little bit more about the
2	background of actually how that happens. But I
3	would love to get back to you when I find the answer,
4	I'11
5	CHAIR POWELL-PALM: Would appreciate
6	it. Thank you, and thank you for your comments.
7	Next up, we have Robert Rankin, and then Kiki
8	Hubbard, followed by Matthew Dawson. Robert, the
9	floor is yours.
10	MR. RANKIN: Thank you. Good
11	afternoon, everyone. Robert Rankin,
12	International Food Additives Council. IFAC is an
13	association representing manufacturers and users
14	of food ingredients. That includes a number of
15	substances permitted for food excuse me, for
16	use in organic handling.
17	IFAC strongly supports the re-listing
18	of carbon dioxide and sodium phosphates at 205.605
19	B, as well as pectin at 205.606. These ingredients
20	are used in alignment with organic principles, and
21	they're essential to organic food production.

Carbon dioxide is used by IFAC members to produce 1 carbonated organic certified beverage products. 2 3 are not aware of additional commercially available organic alternatives that have emerged 4 since the last review. 5 Therefore, removing carbon 6 dioxide 7 from the national list would likely result in a reduction in the number of certified organic 8 carbonated beverages currently on the market. 9 result, carbon dioxide remains essential. 10 11 Sodium phosphates also remain essential to organic 12 food production. Setting phosphates perform 13 important functions in organic dairy foods, including stabilizing proteins and promoting 14 15 emulsification. While other substances such as citrates 16 17 replace sodium phosphates in some 18 applications, such as processed cheese products, members report sodium phosphates perform 19 20 better in most cases, and citrates cannot replace sodium phosphates in all applications. We are not 2.1

aware of any new or compelling evidence regarding 1 impacts of phosphates. 2 the potential health 3 However, I'd like to highlight new research sponsored by IFAC. This shows the majority of 4 dietary phosphorus comes from natural sources, and 5 that added phosphorus in the form of phosphate food 6 7 additives has actually decreased in the food supply between 1998 and 2016. 8 9 In addition to their use in dairy foods, 10 sodium phosphates help improve the quality and stability 11 of poultry products. meat and 12 Therefore, we not only support re-listing sodium phosphates for use in dairy foods, but we also ask 13 the NOSB to consider revising its adaptation to 14 15 include meat and poultry products labeled as 16 organic. 17 Finally, IFAC supports the re-listing 18 of pectin. Pectin is found in almost all jams and 19 jellies labeled as organic in the United States. 20 Pectin is also used in bakery fillings and preparations dairy 21 toppings, fruit for

1	applications, protein drinks, yogurts,
2	confectionery, fruit beverages, and nutritional
3	health products labeled organic. Supplies of
4	organically produced fruit citrus peels remain
5	insufficient to produce volumes of organic pectin
6	needed to meet commercial demand for the many
7	applications where pectin is needed.
8	Therefore, pectin remains essential to
9	organic food production. Thank you for your
10	attention. That's all I have.
11	CHAIR POWELL-PALM: Thank you so much
12	for your comments. We do have a question. First
13	Brian and then Kyla.
14	MR. CALDWELL: Thanks, Robert. I
15	apologize, this isn't about a specific substance,
16	but several of the consumer groups in particular
17	have registered concern about some of the toxic
18	substances that can get into organic foods from
19	either contact surfaces or packaging surfaces.
20	And, you know, the PFAS is a big deal, BPA and the
21	phthalates were also mentioned.

I'm wondering what 1 just your organization is thinking about how to deal with 2 3 this sort of really entrenched problem. maybe, I don't know, like I say, I know you haven't 4 been preparing for this question, but I'd be very 5 curious to hear --6 7 CHAIR POWELL-PALM: Oh, we lost your mic there, Brian. 8 9 Ι think MR. RANKIN: Ι got the 10 majority. Ι think he about done. Т was 11 appreciate the question. You are correct that 12 this is not something at the top of IFAC's list, we deal with direct food additives. PFAS, BPA, 13 14 phthalates are things I would consider to be 15 indirect food additives food or packaging If it's okay with the group, I will 16 materials. try to get some additional questions, a little 17 18 detail into this because again, this is -- I would 19 venture that this is more of a packaging related 20 question than it is a food manufacturing question just in the sense that of using the direct food 21

Τ	additives that I represent, like phosphates and
2	pectin to go into the food product versus potential
3	leaching of these materials from packaging.
4	So I also do work with some packaging
5	groups who might be able to address this question.
6	So certainly, if I could follow up maybe with
7	Michelle and get a little bit more detail on the
8	specific question, and then try to work with some
9	of these groups between now and the fall meeting
10	to answer that. It would also you know, I'll
11	take a look as well as some of the comments you
12	referenced that maybe comment about some of these
13	materials. So that's what I can and maybe try
14	to do between now and the fall that's helpful.
15	MR. CALDWELL: Great. Thanks a lot.
16	I really appreciate it. And we're looking for
17	any kind of input that we can get on these things.
18	I'm not lead on this topic, but I'm very interested
19	in it. So thanks very much.
20	MR. RANKIN: Okay. I mean, obviously
21	any of the some of these things you mentioned

are -- well, I'll take a look at the comments. 1 2 So, thank you. 3 CHAIR POWELL-PALM: All right. 4 you, Brian. Next up is Kyla. Robert, thanks for your 5 SMITH: 6 comments. I wanted to actually ask you a comment 7 that is pertaining to your written comments, particularly around the phosphoric acid annotation 8 9 change. You made a statement in the comment that 10 stated the petitioned expansion will not result 11 in an increased phosphorus content in finished food 12 products, and that should not be a concern to the 1.3 NOSB. And I just wondered if you could speak 14 a little bit more to any knowledge that you have 15 of particular finished food products and like uses 16 that the particular functionality and application 17 18 of phosphoric acid of -- in extraction process as it was -- or petitioned for the annotation change, 19 and how that would relate to a finished food product 20 wasn't entirely clear. So I was just wondering 2.1

if you had any more information in regards to that. 1 Sure. I will first state 2 MR. RANKIN: 3 that, yes, I can address this in my own comments, because this is one that we, you know, because we 4 acid and 5 supported phosphoric do support phosphoric acid for its existing permissions in 6 7 organic food production. And looking at our comments in your question, my view of use of 8 9 phosphoric acid to adjust the pH of an extraction 10 solvent to extract these materials, in my view, 11 that is something that's done more on the front-end 12 of the production process, and that does not mean that that material would have a real presence in 13 an ingredient or a food. 14 15 So, I think that's probably my first response to your question there. I will say though 16 17 that we didn't do as much in terms of looking at 18 supporting that as we did the sunset review 19 So if there is a little bit more that material. 20 we can provide, I can take this back as well and see whether we can provide a little bit more 2.1

1	information on our end as to you're mostly
2	interested in whether the petitioned expansion
3	would result in higher levels of phosphoric acid
4	or phosphorus in the foods?
5	MS. SMITH: Yes. So just it seems like
6	that this would be acting more as like a processing
7	aid, but it wasn't really clear in like what types
8	of ingredients or it was clear that it was would
9	be used as an extraction process for an ingredient,
10	but ultimately what then those ingredients like
11	would get used in finished food products for, it
12	was not clear. And
13	MR. RANKIN: Okay. I don't know
14	either off the top of my head. So let me see if
15	I can figure it a little bit more on our end and
16	help provide that for you.
17	MS. SMITH: Thanks.
18	CHAIR POWELL-PALM: All right. Any
19	other questions for Robert? Thank you very much
20	for your comments and your time, Robert.
21	Appreciate it.

1	MR. RANKIN: Thank you.
2	CHAIR POWELL-PALM: Next up, we have
3	Kiki Hubbard, followed by Matthew Dawson, and then
4	Adam Seitz, and then we will take a break. So,
5	Kiki, good to see you.
6	MS. HUBBARD: Thanks.
7	CHAIR POWELL-PALM: All yours.
8	MS. HUBBARD: Thank you. Thanks to
9	all of you NOSB members and the NOP for creating
10	this virtual space today. I'm Kiki Hubbard, I'm
11	the director of advocacy and communications for
12	Organic Seed Alliance. And for those of you who
13	aren't familiar with our work, we are a
14	mission-driven organization that works to ensure
15	organic farmers have the seed they need to be
16	successful and we achieve this goal through
17	research, education and policy advocacy.
18	My comments today will focus on the
19	materials subcommittee's excluded methods
20	proposal as well as organic seed. We have been
21	very supportive of the subcommittee's excluded

methods work, which spanned, gosh, nearly 10 years now I believe and we have supported all of the excluded methods proposals that the Board has unanimously passed to-date. We also support the current proposal on determinations for cell and protoplast fusion. And we strongly support the Board's recommendation within this proposal that the NOP develop a formal guidance document to include the criteria, definitions and excluded and allowed methods tables that were developed as part of previous proposals.

Т think all we can agree that understanding and addressing plant breeding techniques that may or may not align with the excluded methods definition is critical work, and that the lack of clarity risks slowing progress toward another organic integrity goal, which is to plants more organic seed on organic land. this is an important point of context for the excluded methods conversation because regulating excluded methods is more feasible within the

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confines of certified organic seed production than it is within the conventional seed space.

And as long as growers -- organic growers are mostly sourcing conventional seed that is produced outside the rules of certified organic production, it's going to be difficult to require transparency regarding the methods behind the seed organic growers are using. A few weeks ago, OSA was proud to release the third update to our state of organic seed report. And unfortunately, our most recent data shows no meaningful improvement in organic producers using more organic seed compared to 5 years ago.

This data makes clear that improvement in organic seed sourcing is not happening without regulatory changes. We now have 15 years' worth of data on organic seed sourcing. And this is where we are. I'll be expanding on these findings during a presentation to the NOSB next week. But the take-home is that organic seed availability has increased tremendously since NOP was

And it's time that policy follow suit 2 3 to protect the progress that we've made and to ensure that organic farmers plant more organic 4 seed, and that more organic food begins with this 5 critical first input of organic seed. 6 We hope that NOP will reconsider its rulemaking priorities by 7 including the timely priorities of both excluded 8 9 methods as well as an update to the organic seed 10 regulation. Thank you. 11 CHAIR POWELL-PALM: Thank you so much 12 for your comments, Kiki. Any questions from the 1.3 Board? Amy. thank you, 14 MS. BRUCH: Yes, 15 Thank you, Kiki. Appreciate your time here today and your written comments, and then looking forward 16 17 to your presentation for our upcoming board meeting 18 next week. This is really fascinating for me, this 19 subject in particular, and it's really important. 20 I think you made a good point about the guidance, you know, we can't necessarily do too much if folks 2.1

implemented 20 years ago.

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1	are, you know, using conventional seeds that
2	industry isn't as transparent as what we want our
3	organic processes to be.
4	I was wondering if you have some more
5	information on international producers and their
6	chains of developing seed and just how, you know,
7	our program is a very global program now, and I
8	think there is tremendous efforts being put into
9	this arena domestically. I was just kind of
10	curious on an international front.
11	MS. HUBBARD: Yes, we don't collect
12	international data. I can point you to some
13	reports by international partners. It is fair to
14	say that there has been more progress in trying
15	to close some of the exemptions to use non-organic
16	seed in other countries. And that's all I can say.
17	At this time, we do not have data at our
18	fingertips, but I could point you to some promising
19	leads.
20	MS. BRUCH: Okay, sure. That'd be
21	helpful. Thank you, Kiki.

1	MS. HUBBARD: Thanks, Amy.
2	CHAIR POWELL-PALM: We have a question
3	from Mindee.
4	MS. JEFFERY: Thank you so much for
5	your work on this subject, Kiki. Just to really
6	encapsulate it for myself. The foundations of
7	transparency and organic supply chains, as far as
8	excluded methods really has to start with organic
9	seed. Okay. That's want to make sure I got
10	it like in there.
11	MS. HUBBARD: Yes.
12	MS. JEFFERY: Appreciate you. Do you
13	have anything else you wanted to say on that in
14	the sense of especially regarding the TBD list
15	as we move forward?
16	MS. HUBBARD: I mean, just that there
17	are going to remain challenges in terms with
18	transparency, because some of these methods are
19	hard to test for, you can't test for them. And
20	so coming together as an organic community to
21	create processes and policies that support more

1	transparency, and that may clear which methods are
2	excluded or not, is going to go a long way in both
3	supporting the integrity of the organic label as
4	well as ensure that we are encouraging more organic
5	seed usage across the country.
6	CHAIR POWELL-PALM: All right. Thank
7	you, Mindee. Javier has a question.
8	MR. ZAMORA: Sure. Kiki, thank you so
9	much for talking about our seeds. And I just have
10	a question for you. And this is just a something
11	that I've seen lately, as a organic producer
12	extends his or her operation, the limitations of
13	sourcing organic seeds are just greater. And I'll
14	give you a really good example. Are you I think
15	I froze. Are you okay? Are you listening?
16	MS. HUBBARD: I can hear you, yes.
17	MR. ZAMORA: Okay. A couple of years
18	ago, our Early Girl tomatoes, our seeds, I saw the
19	package that came out of China. And this is
20	something we organic growers in the Santa Cruz area
21	have relied heavily on, you know, dry foreign

tomatoes and seeds that are organic. So I -- mv 1 question to you is, what -- do we know what the 2 3 percentage of organic seeds are coming from other countries that are not necessarily produced in the 4 United States? 5 We don't have data on 6 MS. HUBBARD: 7 where all the organic seed in the commercial marketplace is being produced. We do not have that 8 I mean, the best way to get that data is 9 to go to the industry themselves and ask for, 10 11 You mentioned -- just quickly, I'll touch Javier. 12 on your point about as you increase scale, or you're 13 working to transition into organic. Yes, there are a number of reasons why 14 15 organic producers haven't been able to source more organic seed. One of them is quantity, especially 16 17 as they scale up. And that's where the important 18 role of certifiers and inspectors come in, in terms 19 of encouraging continuous improvement year-to-year and encouraging for example, earlier 20 communication with seed producers 2.1 and seed suppliers about which varieties are needed, not only in an organic form, but also in the quantities they need.

This is very much tied to the challenges that processor and buyer contracts pose as well. In our most recent data, more than 30 percent of organic farmers who responded to our national survey, more than 30 percent said that these contracts with processors and buyers are serving as a barrier to increasing organic seed usage, because too often these contracts dictate a variety be grown that's not available as organic, or they're supplying the seed directly, and it's not organic.

That is a huge opportunity. Right now, it's a huge challenge to increase the more organic seed usage, especially with larger scale operations. And so there's a real need for your organic community and for you as a board to come together about this gap as we see it in the regulatory space.

1 CHAIR POWELL-PALM: All right. Thank 2 you so much, Kiki. Next up we have Matthew Dawson, 3 and then Adam Seitz. First of all, I just want 4 MR. DAWSON: 5 thank you for your service, the organic 6 community, and the opportunity to participate 7 My name is Matt Dawson. Ι today. am the aquaculture director for Upward Farms located in 8 9 beautiful Brooklyn, New York. We've operating for about 9 years and are looking forward 10 11 to continue growth with our strong consumer demand 12 that we -- as we set out to build the world's largest vertical farm, which is currently in the design 13 14 phase. 15 Upward Farms is an integrated aquaponic vertical farm company growing certified organic 16 17 leafy greens, but also best aquaculture practices 18 certified fish under the highest ecological and 19 quality standards available. We do hope to become 20 certified organic on the aquaculture side as soon as possible, as I'm here today. And we -- while 2.1

we recognize that several priorities compete for 1 asking 2 attention, we're the NOSB to begin 3 reconsideration of inputs and substances on the exclusion the national list 4 for on aquaculture practice standards, which have been 5 previously considered, we trust will be working 6 7 their way through the proposed rulemaking.

We believe organic food, including seafood, provides outsized benefits to consumers, local economies, and the planet alike, and drives food production towards sustainability. With the recent executive signing of the Aqua Act, and the number of land-based facilities currently in the design or construction phase, the aquaculture industry here in the U.S. is actually poised for growth at an unprecedented rate. This means that the NOSB has a real golden opportunity not only to shape, but to elevate industry standards while they're being established.

But just a few benefits to kind of gear
yourself towards land-based restricting

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aquaculture such as ours that currently provides

-- they provide reduced impact to native fish

populations and ecosystems, minimal need for

antibiotic use, some of the highest food security,

localized production, thereby reducing the food

miles, greenhouse gas emissions, and related

climate footprint, complete traceability of the

consumer including accountability of production

inputs and outputs.

And you all know the benefits that organic practices bring to people on the planet, you know them far better than I. You are seen as industry leaders who have the agency to lead the industry towards positive change to make positive impacts, and I'm for you to use the agency to be proactive so that regulations can support the proactive positive change we all agree we so desperately need. I want to thank you again for the opportunity to talk today and provide these comments and for your consideration. Thank you.

CHAIR POWELL-PALM: Thank you so much

for your comments and taking the time to tell --1 speak with us today. Any questions for Matt? 2 3 Thank you again, Matt. Lastly, before our break, we've got Adam Seitz with QAI. 4 Good afternoon. 5 MR. SEITZ: My name is Adam Seitz and I serve as a senior reviewer of 6 7 policy specialist for Ouality Assurance International, and SF International Company of a 8 9 leading provider of organic certification services Check your local grocery and you'll 10 worldwide. 11 find the QAI mark well-represented on its shelves. 12 First, thank you, NOSB and NOP for your efforts and for the opportunity to comment. 13 research priorities, we were a bit surprised to 14 see the addition of a priority focused on ancillary 15 ingredient review. is unclear what 16 Ιt t.he intended outcome of this research priority is given 17 18 there was already a unanimously supported 2016 NOSB 19 recommendation on a review process for ancillary It's a complicated topic with various 20 substances. perspectives, and while most of the positions on 2.1

ancillary ingredient review are justified for one 1 reason or another, ultimately the unanimously 3 passed 2016 recommendation establishes a workable path forward for consistency if implemented. 4 Sunset review, please see our written 5 6 comments detailing the use of sunset materials by QAI certified operations. It's worth noting that 7 every handler input up for sunset review is in use 8 by a QAI-certified operation. Regarding ethical 9 guide sunset review, QAI asked the NOSB discuss 10 11 potentially clarify via annotation 12 permitted forms of ethical guide specifically with regards to whether acid leach activated or treated 1.3 forms are permitted by its national list inclusion. 14 15 Please see QAI's written comments for background 16 on this topic. On sodium carbonate sunset review, we 17 18 that the NOSB examine the prevalent request 19 manufacturing processes to ensure appropriate 20 classification and/or annotation as it appears

sodium carbonate may be more appropriately listed

at 605-B with an annotation to only permit forms
produced via the Turner (phonetic) process.

Phosphoric acid; QAI does not have a position annotation on the current change However, while examining a potential annotation update, please consider correcting its current national list inclusion. The current annotation allows phosphoric acid for cleaning of food contact surfaces and equipment only. listing of phosphoric acid as an approved cleaner at 605-B causes confusion regarding its permitted uses.

Cleaners are nearly always removed from food contact surfaces via water rinse prior to contact with organic product. Sanitizers, however, are rarely removed from food contact surfaces via water rinses. Doing so typically violates label use instructions and their purpose. There appears to be uniform acceptance, at least based on current interpretations of what is and what is not required to be on the national list,

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via 1 t.hat. cleaners removed validated 2 intervening event do not need to be listed, whereas 3 sanitizers that are not removed do require inclusion on the national list. 4 is of course pending further 5 discussion on the food context substances can of 6 7 Depending on how the NOSB addresses the worms. phosphoric 8 acid annotation current change petition, it may be appropriate to either remove 9 10 phosphoric acid from 605-B entirely, if only 11 intended for use as a cleaner, or to annotate as 12 allowed for sanitizing food contact surfaces and 13 equipment. Thank you for your time. 14 CHAIR POWELL-PALM: Thank you for your 15 Any questions from the Board? comments. All right, appreciate it, Adam. We're going to break 16 17 for 15 minutes. Coming back at 45 after the hour. 18 We're going to start with Bill Wolf, and then 19 Linley Dixon, and then Tim Cada. So see you all back at 45 after the hour. 20 (Whereupon, the above-entitled matter 21

1	went off the record at 3:29 p.m. and resumed at
2	3:45 p.m.)
3	CHAIR POWELL-PALM: Are you ready to
4	go, Michelle?
5	MS. ARSENAULT: Bulls eye there. One
6	moment, we'll get Bill's slide up.
7	CHAIR POWELL-PALM: Okay. Sounds
8	good.
9	MS. ARSENAULT: One moment, Bill. All
10	right.
11	CHAIR POWELL-PALM: All right. Bill,
12	the floor is yours.
13	MR. WOLF: Wow, okay. You guys are
14	really on time. This is amazing.
15	CHAIR POWELL-PALM: It's the U.S.
16	government, sir.
17	MR. WOLF: Well, I would say that every
18	NOSB meeting, I've never seen comments actually
19	hit the time that was on the schedule. And now
20	I'm using up my time.

Okay. I am Bill Wolf with Second Star

Farm and Wolf & Associates. 1 I've been an organic 2 farmer, entrepreneur and consultant for 50 years, 3 focused on increasing organic acreage to foster better stewardship worldwide. NOSB topics were 4 5 simpler at the first NOSB meeting 40 years ago. 6 Today you tackle more issues than any other FACA 7 in the entire country. I thank each of you for the awesome volunteer work you do. And I strongly 8 9 urge you to receive more staff support. 10 Slide 2, please. Organic has grown 11 exponentially, but infrastructure has not kept up. 12 Wolf & Associates submits a range of written comments, including ways to address this growth. 13 We recommend prioritizing and sometimes rejecting 14 15 non-essential topics. This means triage. also and, John Foster, my associate, addressed this 16 17 strongly request earlier, that commercial 18 availability apply to Section 605. I'll get into 19 more details on two of these. Viewing the National 20 List as a toolbox for growth and improvement and accepting expert support for your work. 2.1

The National List is Slide 3, please. a toolbox, not a soapbox to attract political and The goal should not non-organic social agendas. be to shrink the list. Famers and handlers need to complete a robust set of materials that meet the strictest evaluation criteria in the world. Annotations should only clarify, not complicate and the decisions you make to protect choices, materials that aren't widely used now, maybe useful in the future, organic farmers deserve and need a robust toolbox. When publishing proposals for comment, please make sure the information is accurate, which takes me to the next slide.

As an advisory board, your job is to make recommendations in difficult positions, not be experts on everything or expend valuable volunteer hours on operational processes. Three areas where expert's important, will help you do your work, verify facts, help prepare subcommittee recommendations, summarize and accurately report on the content of oral and written comments and

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1	draft your recommendation so that they can actually
2	be accepted, implemented and enforced.
3	Slide 5, please. Earthworms are a de
4	facto mass found in organic agriculture. I've
5	brought earthworms to in-person meetings and so
6	these virtual webinars will have to suffice now.
7	When you vote, please consider what would be good
8	for them.
9	Slide 6, please. Applying all of these
LO	principles. We have submitted comments on
L1	numerous topics, some are listed here, please
12	review it.
13	Slide 7. Thank you for this
L 4	opportunity.
L5	CHAIR POWELL-PALM: Thank you, Bill.
L 6	Appreciate your time and your work in the
L7	industry. Any questions from the board?
L 8	I have just one. Since you did note
L 9	that we are on time, I better throw a wrench on
20	that. Could you speak a little bit to, if we're
21	saying in the next 10 years, we want to see organics

be half the food market, not just 5 percent. 1 are the key moves that either regulations, the 2 3 market or us as the leadership and voice of the community on NOSB can be making to help catalyze 4 that more rapid transition of farms to organic, 5 but in a way that meaningfully supports farming 6 7 families? MR. Good question, 8 WOLF: complex 9 question and yet fairly simple. One of the biggest

question and yet fairly simple. One of the biggest challenges I think the organic community faces is our divisiveness. What I mean by that is that because there's tension and messaging to the public and to the media and to government officials that there is, that we don't, we aren't unified about many things. We're easily ignored. It's easy for the Secretary of Agriculture to say no, I'm not going to do this, I'm not going to do that. Or that the USDA is going to not really treat organic as a major climate change initiative. They're going to move elsewhere.

So, our very divisiveness plays a huge

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Τ	role. When you actually go back to what the USDA
2	Organic Seal represented in 2002 to 2003, when it
3	first appeared, the public considered it the most
4	trusted label ever in the marketplace. That
5	declined from the 90 percent tile to below 50
6	percent. I don't know the current poll number,
7	but it's not a trusted seal in the way it was.
8	And that hurts all of us regardless, I mean, there
9	are problems with certification. There are some
L 0	fraud, et cetera. But the fundamentals are sound.
L1	And so a united front would make a huge difference.
L2	And with those differences and disagreements, we
L3	need to hash out and have a place to hash out, rather
L 4	than being the circular firing squad.
L5	The second part is acreage in U.S. with
L 6	a huge amount of organic production is still crops
L7	that are imported that could be produced here.
L8	I understand and accept and appreciate bananas and
L 9	coffee and all kinds of crops that can't grow here.
20	But the ratio of grain, the ratio of acreage isn't
21	even close to 5 percent acreage in U.S. and focusing

1	on encouraging that acreage, creating economic
2	incentives. If you look at what the European Union
3	is doing compared to what the USDA is doing, it's
4	like night and day. We're tolerated versus
5	accelerated.
6	So, I don't want to get you too far off
7	your time schedule. But those would be my two
8	biggest points of really getting to 50 percent.
9	CHAIR POWELL-PALM: I so appreciate
10	that, yes. I think protecting what we've built,
11	but also promoting it needs to go hand in hand.
12	All right. Thank you so much for your comments.
13	MR. WOLF: Thank you.
14	CHAIR POWELL-PALM: We'll go on to
15	Linley Dixon. And then we'll have to Tim Cada and
16	Jill Smith. So, Linley, please go ahead.
17	MS. DIXON: Hi, I'm Linley Dixon,
18	Co-Director of the Real Organic Project and owner
19	of a certified organic vegetable farm in Southwest
20	Colorado. I want to simply remind the NOSB and
21	NOP that climate change is the environmental crisis

of our time. And it's not clear to consumers that organic is already a label that has so many climate I believe this is because the Nash benefits. organic program has failed to uphold the language specifically the requirements and OFPA, maintain and improve healthy soils. There is so much greenwashing and confusion around constitutes climate smart. We've even seen it Everyone's claiming it and it's only going to get worse.

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I'm going roque today to share a story that an organic pioneer shared with me in my travels through the organic project. And it's helped me to wipe away the confusion that creeps in while lobbying from various listening to all the stakeholders. This organic pioneer told me to imagine a continuum of the most sustainable organic, regenerative, whatever term you want to call it, climate smart farm on one end and then the most climate destructive farm on the other.

And imagine that every operation falls somewhere along that continuum. This farmer said that the most sustainable farm at the start of the continuum is simply a farmer with a shovel and some seeds. And then the more inputs you add, the further down that line away from perfect sustainability you're going to go. And so you get to the very opposite extreme where you have either a confinement or a hydroponic operation where all of the inputs, including the soil and all the fertility are completely sourced externally, regardless whether or not the inputs are on the National List, they all have a story behind them. And as one former NOSB member told me, it's not a story you want to hear. In short, these inputs had a climate impact to get to the farm. And to really be climate smart, you're going to have to sequester that I'm not so naive as to think that carbon back. all the farms can be that beautiful image of a farmer with a shovel and some seeds. That's why

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we have a National List in our organic program. 1 2 But my hope is that this image of the continuum, 3 based on adding more and more inputs, leaving you and further astray from that 4 sustainability can help you clarify your thinking 5 6 and you can use it in your decision-making. 7 have to draw that arbitrary line somewhere along that continuum for what is organic to you, guided 8 by OFPA. 9

We're all going to inevitably choose it in a different place. But remember that every input you approve in organic will inevitably disincentivize a more sustainable way. As some of our real organic farmers have said, allowing something often inadvertently mandates it because it results in a cheaper way. Please use your esteemed position as National Organic Standards Board members to publicly fight for the language in OFPA that describes what organic farming is. And we'll remind the world why organic is always the best choice, especially when it comes to

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climate. Thank you for volunteering your time 2 3 and I hope this story can help quide you through all of the greenwashing fog. 4 CHAIR POWELL-PALM: Thank you, Linley. 5 That was lovely. Does anybody on the board have 6 7 a question for Linley? Hearing none. I have a question. And similar to what I asked Bill Wolf, 8 9 despite everything, we're still only 5 percent of the market. We're still only 1 percent of the 10 11 Well, what's it going to take to get to 50 12 percent of the market? And hopefully all of that domestically everything 13 grown or we can climatically grow domestically, how do we get that 14 15 position at the table for being the climate smart 16 solution and making it so that we are able to 17 leverage everything we've built to actually have 18 a meaningful impact in the biggest challenges we're 19 facing, as you said it in the beginning, climate 20 change? MS. DIXON: I think we need to be 21

1	louder. I think we need to have acted as farmers.
2	I think we need to stand up for what we believe
3	in. I think we need to describe organic as more
4	than just something without unapproved inputs or
5	it because it is so much more. I live in an organic
6	farming community, lots of organic farmers and
7	growing. And there are only a handful that are
8	certified organic and I believe that is because
9	we are failing to enforce OFPA and be very vocal
10	about what organic is. I think it's becoming a
11	more industrialized label. And so many of the next
12	generation of farmers are not seeing themselves
13	as organic farmers anymore and they are, and we
14	need to bring them back by, you know, being vocal
15	as a community about who we are. CHAIR
16	POWELL-PALM: Is there a way to be vocal as a
17	community without the circular firing squad?
18	MS. DIXON: I actually don't know that
19	there is a circular firing squad. I think the
20	organic movement are the organic farmers. And I
21	don't think we, you know, these basic tenants, the

1	principles about what organic farming is are across
2	the board. It's what the organic farmers believe
3	in. And I think the industry has invented a
4	circular firing squad. I don't think it really
5	exists among the farmers.
6	CHAIR POWELL-PALM: Thanks for your
7	comment today. Appreciate it. Next up we have
8	Tim Cada follow by Jill Smith and then Dave Chapman.
9	MR. CADA: This is Tim.
10	CHAIR POWELL-PALM: All right. We can
11	hear you. Go ahead.
12	MR. CADA: Good. Hey, my name is Tim
13	Cada, I'm organic farmer from Clarkson, Nebraska.
14	Farm has been in the same family since 1871. I
15	got certified in '94 with our 400 acres. This year
16	we have about 1,100 of which half is rangeland.
17	We do not rent any ground. I have served on
18	numerous OCI Boards, state and internationally.
19	We are certified by OneCert today, couple of
20	people today, I know that we're on, it's like four
21	or five of you, it's kind of cool to see you. This

2 days. 3 Organic fertilizers changed a lot in the last 25 years. More large companies see a need 4 5 for more potent nitrogen source and it kind of get frustrating. A lot of big farmers that have a 6 7 little bit of organic are testing the waters. they just want to make easy money, bouncing in and 8 9 out as it fits their schedule. Clean out a 10 machinery, mixing grain, do they really care about 11 anything but the money. Ι see it in 12 neighborhood. I've heard about it in Eastern 13 Nebraska. Actually in Nebraska as a whole, just there is a comment here and a comment there where 14 15 somebody is using herbicide as a burn down. 16 these things get reported to USDA and that's the last thing you ever hear of it. Does anything ever 17 18 happen? 19 Mark Kastel talked about big company 20 Sure, there is big company fraud. fraud. What about fraud at the local level, where 2.1

meeting kind of reminds me of old OSGI (phonetic)

neighbors or maybe that we know that organic have twice the corn meal that we've had and good for them, that's cool. They put it in their bin and then another neighbor says, I thought this was the organic corn, why are you holding it to a local feed yard? Questions like that, when I hear comments like that from people, it's like, what are we doing to please ourselves. Small farms can pay for the audit, the supplies audit that would just be the yearly inspection of the year. I'll substitute it in that way.

T+ would be more of surprise а inspection than a planned inspection. If I know you're coming, I know I better have my paperwork, but what about 3 weeks earlier? Maybe that's a good time to show up. I've heard of guys telling corn out of the organic vignette, I went over that. Kiki talked about organic seed. I've been told to wait longer to order my seed, that way I have to buy non-organic seed because the organics seed available this year, \$40 organic soybeans, buys

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a lot of \$40 seeds. Years ago an organic producers 1 spread his corn with 2,4-D, nobody will ever know. 2 3 Well, how do we catch those guys? I see my time is about out, guys. I do respect you guys. 4 up the good work and it's kind of cool except the 5 6 May and October meeting times don't coincide with 7 our planting and harvesting. CHAIR POWELL-PALM: Thank you. 8 Thank 9 you so much, Tim. I hope you understand how mutual the respect is. We really appreciate your insight 10 11 and taking the time to speak with us today. 12 questions from the board for Tim? I have one. 13 As a long time organic farmer, what would you say is, how would you describe the 14 15 difference between organic farming as far as its ability to enable a resilient business, a resilient 16 And compare that, contrast that with 17 farm? 18 conventional farms who are looking at shocks to their supply chain, shocks to their systems, say 19 in the fertilizer realm. What's the fundamental 20 difference that you see between organic farming 2.1

and conventional farming?

This year and a few years 2 MR. CADA: 3 ago when corn hit \$7, I asked myself why I am organic I know why I'm organic farming, but my farming? 4 income has been the same as my neighbors. 5 always kind of kicks me off. 6 I go through more We looked for a little bit more money as 7 work. if we're more proud of our crop. We know that it's 8 going to Clarkson specialty grains or to free those 9 or to Clarkson grain, you know, wherever, we know 10 11 our product is ending up.

We bought 80 acres across the road this year. My one son says no, I'm going to farm it conventional, dad, because I can get \$6 corn. Well today corn is \$8.25 I believe at the local corn plant. And he says, we'll switch it to organic after that, it's easy money. Now, and then he says good thing I don't need any 11520 because I can't afford it this year. So the fertilizer costs are hitting the young guys, you know, pretty hard. And he's saying, next year we will put it into

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We'll sort of -- we're 1 going transition. 2 3 CHAIR POWELL-PALM: Okav. Do you think that there's something that is missing in 4 our industry to keep organic as a more obvious 5 6 choice for long-term investments by producers? 7 MR. CADA: Do you remember 3 or 4 years ago, successful farming had to meet your new boss 8 9 and it was a mother and her child on it. 10 (phonetic) conference was held in Omaha that year, 11 since it was Omaha, I quess, I better go. 12 believe Gary Zimmer was up talking. And at the end of his talk, he brought her up on that screen, 1.3 says, look at your new boss and my hair just stood 14 15 up because I was thinking the same thing. 16 You know, as a soybean producer, we 17 don't have to pay check-up on soybeans. 18 into Missouri to get my exemption as usual. 19 finally, after all of these years, I told the gal 20 I'd like my money back because you really don't do anything for organic. And lo and behold, her 2.1

answer was, well, what do you think we're going 1 to get all our food from? The thought process is 2 3 changing with our younger people and it's kind of cool to see. My 21-year-old son wants to farm now. 4 He says I want to keep it organic, dad, because 5 6 it's the way to go. Young kids are seeing, it's 7 working. And besides that, the Roundup doesn't taste very good. 8 9 CHAIR POWELL-PALM: Thank you, again, 10 Amy, I saw your hand go up. Did you have so much. 11 something real quick? 12 MEMBER BRUCH: Oh, sure. Thank you, Thank you, Tim. I know you're a busy guy 13 Nate. being farming season here in Nebraska. 14 15 wanted to ask you the question, you were talking about just kind of transparency a little bit. 16 17 of our agenda items is kind of the verification 18 Do you think it would be worthwhile for keys. 19 acres and products, acres and crops, if you will, 20 to be placed on the organic certificate of each producer? 21

1	MR. CADA: That's the way OneCert used
2	to do it and then they changed it. I believe they
3	changed it. I can't say for sure. I just don't
4	remember. But the acres are a pretty good deal
5	because if I have the same inspector as my neighbor,
6	and my neighbor has 200 bushel of corn and I have
7	a 100 bushel of corn, you better be going like
8	what's the difference there. It's got to be, there
9	is an issue. Acres, yes. I don't have a problem
10	with that as long as the yields are closed, you
11	know, 140 or 160 bushel of corn is fine. But if
12	you come up with 220 organic corn in dry land,
13	something is wrong, if nobody else has corn as that
14	much, you know. There's a lot of things to look
15	at there, Amy, it is concerning.
16	MEMBER BRUCH: Okay.
17	CHAIR POWELL-PALM: Thank you, Tim.
18	Really appreciate your comments and your time
19	today. And thank you, Amy, for that question.
20	We're going to go on to Jill Smith,
21	followed by Dave Chapman and then Gwendolyn Wyard.

1 Jill, all yours.

2 Okay. Hi, everyone. MS. SMITH: 3 Smith, Executive Director at the Western Organic Dairy Producers Alliance. 4 Some of vou 5 know us as WODPA. And I'm also an organic producer out in Eastern Washington. So, first I'd like to 6 7 thank you guys for the opportunity to provide comments on behalf of WODPA today and thank all 8 9 of you board members for your service to the organic I'd also 10 community. like to express mу 11 appreciation for you guys standing by as we work 12 towards a final rule on origin of livestock. support was unwavering overall those years. 13 So, 2022 has brought some wins for 14 15

organic dairies. I'd briefly like to share the enormous battle we're experiencing across And that battle is to actually stay in business an organic dairy. pulled as As Ι producers with questions about materials for livestock other issues. and NOSB Ι was overwhelmingly met with greater concern about

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making ends meet and what the future looks like for their dairies. I'm concerned that we're facing a new landscape. And it's a landscape that includes fewer small to mid-scale size organic dairies with a declining costs combined with buyers, droughts, flooding, you name it, and our milk prices staying stagnant for years. This looks to be possibly a disastrous time for organic dairies in the west.

And there's a trickle-down effect that comes along with that, that impacts our entire organic community. On the home front we face the myth that organic producers make more money because organic products sell at a premium price. we've remained far from achieving a fair living wage for our dairy producers. And these producers year iobs within provide round our rural communities, buy the organic feed crops, purchase inputs locally and from our manufacturers within the broader organic community as well as providing byproducts such as manure that's used

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3 comments on other specific issues that we're addressing today. But I share this because I think 4 it affects all of us within the organic community. 5 In addition, we're in desperate need of data and 6 7 transparency in our milk market. As producers are faced with making these tough decisions on their 8 9 operations, especially given our current environment, they find little to no information 10 to make decisions on the future of their dairy. 11 12 I'd encourage USDA to consider how they can 13 provide help in this area and show greater regional information. 14 15 With the questions on supply chain traceability, I do believe we should include crop 16 17 reporting with those acreage for those pieces of 18 the farm, excuse me, that are dedicated to pasture 19 and the number of cows as this is essential to

realize

I'm

verifying pasture compliance or pasture compliance

being met, pardon me.

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1	As stated in my comments, we support
2	the relisting of the livestock materials under
3	consideration, and I largely heard that now is not
4	the time to limit the tools for organic dairy
5	producers. After listening today, there are some
6	things I wish I could comment. At this time I'll
7	thank you for your service and the chance to provide
8	comments on behalf of WODPA. And I'd be happy to
9	answer any questions you have on substances or
L 0	anything else that I didn't get to today and make
L1	comments and get it covered very well.
L2	CHAIR POWELL-PALM: Thank you for your
L3	comments as well as for all the work that WODPA
L 4	does.
L 5	MS. SMITH: Thank you.
L 6	CHAIR POWELL-PALM: Do we have any
L7	question from the board? I have a quick one for
L 8	you, Jill. When we look at this question of farm
L 9	viability, and this is a question we ask ourselves
20	across the entire nation. It's not really
71	regional specific. What besides, I guess, outside

1	of NOSB, it seems like we have a lot more tools
2	for addressing this question of farm viability.
3	Be it co-operative marketing, supply control,
4	other avenues we have to try to figure out how do
5	you shore up these family instances (phonetic).
6	Do any come top of mind for what the biggest thing
7	the organic community should be looking at? I
8	think as NOSB and as a community we often find
9	ourselves very much in the weeds about materials,
L 0	very specific questions on practices. But the big
L1	picture, could you kind of bring us to a higher
L2	view for what we can be doing and thinking about?
L3	MS. SMITH: Well, I think one thing we
L 4	have to think about when it comes to organic
L 5	products is looking at the true cost of production.
L 6	And being paid based on that cost of production
L7	versus just having a price dictated to us without
L 8	taking that information into consideration, I
L 9	think that's a huge piece to it.
20	And I think we've heavily, in the past
21	couple of years, relied on programs which nobody

wants to do. But if these programs are going to 1 2 be out there, than we also need to ensure that they 3 have organic specific accommodations. actually apply to the 4 of them smaller 5 producers, you know, I was part of the conversation 6 where it was thrown out that there were so many 7 programs or 50 some programs that apply to dairies. But when you look at that, you know, we're smaller 8 9 typically than the dairies that are producing a huge amount of milk. And they don't work for us, 10 11 you know, because we're not big, huge dairies with 12 big volumes and that sort of thing. 13 So, we need help in that area too to get things that are specific to organic and organic 14 15 dairy, especially as we see conventional milk prices being at record highs, you know. 16 So, those 17 programs don't work the same way for us. 18 know, even one of the latest programs that came 19 out, comments were sent back that we had to look 20 at hauling our cattle to forage, not just the

freight on feed that we're bringing in, but the

1	expenses that we have as we move cattle to pastures
2	and that sort of thing, whether it be Heifer's Dry
3	Cows. But we have to look at those added expense
4	as well. So, we need some organic consideration.
5	And I think another huge concern I have is that
6	regenerative may take over regenerative organic.
7	And can we be lost in that shuffle, you know, how
8	does organic set itself apart, so it's not lost
9	in that regenerative movement.
10	CHAIR POWELL-PALM: Really appreciate
11	that. Yes, unified messaging. I think we're
12	hearing that a lot. Thank you for your comments
13	today. Appreciate your time.
14	MS. SMITH: Okay. Thanks.
15	CHAIR POWELL-PALM: Next up, we're
16	going to have Dave Chapman, followed by Gwendolyn
17	Wyard and Johanna Mirenda. Dave, floor is yours.
18	MR. CHAPMAN: Okay. I'm trying.
19	There we go. Okay. Thank you very much, Nate.
20	Hi, everybody. Dave Chapman. I'm a long-time
21	organic farmer from Vermont. And I'm also

1 Co-Director of the Real Organic Project.

2 And I want to speak today about a recent 3 NOP action on one of the hot issues that organic certification is facing. A number of certifiers 4 have stated that they will not certify chicken 5 6 porches or CAFOs, even though it is allowed by the National Organic Program. CCOF is one of those 7 and they've been given the investing and integrity 8 award for many years at the same time insisting 9 10 that they will not certify these operations. 11 We're facing several challenges. 12 They're defining practices of organic farming that had been abandoned by the USDA these days. 1.3 creates tremendous turmoil in the organic 14 15 There are also a number of certifiers who refuse to certify hydroponic production as 16 17 And that's what I wanted to mention. organic. 18 One of the most vocal of these is OneCert. 19 they were recently issued a noncompliance by the

just say they lack the administrative capacity to

It was suggested that they, if they would

NOP.

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1 certifier hydroponics, all of it would be forgiven.

2 But they didn't, because they didn't, it wasn't

3 true. They just didn't believe that certifying

4 hydroponics was legal based on their understanding

of OFPA. So they were awarded a non-compliance

6 which has been put on hold pending the outcome of

7 the lawsuit.

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Few things. The NOP tolerates or even celebrate certifiers who refuse to certify CAFOs, but they punish certifiers who refuse to certify hydroponics. OneCert's non-compliance was about obedience, not about bad action or behavior. was not based on their certifying an undeserving Well, other certifiers are doing the operation. OneCert is the one being called out, same thing. which makes it look as if OneCert has been called out to serve as an example to all and instill some fear into the many certifiers who are not certifying hydroponic. The majority of certified farms in America agree with the position taken by OneCert and virtually all other countries in the

world agree with OneCert. So, this is an example 1 of the USDA redefining organic to suit certain 2 3 corporate interests. The thousands of organic farms that do 4 not believe that hydroponics should be in the 5 6 organic program will not quietly stand by while those certifiers known and respected for their high 7 levels of integrity are punished. Thank you very 8 9 much. 10 CHAIR POWELL-PALM: Thank you very 11 much for your comments, Dave. Do you have any 12 questions from the Board? Seeing none, I will pose a similar 13 question to kind of the theme of the afternoon. 14 15 I live in rural America as many on this call do. I cannot find any organic food in many of the 16 17 grocery stores which I shop in. What do we do to 18 make it so that we can all realize access to organic 19 I quess, actually let me phrase it a little foods? 20 different. With your concerns about all the different production practices, why don't we see 2.1

1	the market flooded with organics? Why is it still
2	5 percent of the market, 1 percent of the land,
3	if it's so easy to have these practices that you
4	say just be not necessarily in the spirit of OFPA?
5	MR. CHAPMAN: Yes, it's great
6	question, Nate. I appreciate you asking it. You
7	know, the EU has got 36 million acres of certified
8	organic land and the U.S. has about 6 million acres.
9	And we have greater organic sales than they do,
10	not by much. They're keeping up pretty closely.
11	And the amazing thing about that is that they don't
12	certify hydroponics and they don't certify CAFOs.
13	So, I would say they're doing this with a much
14	higher level of integrity, which I think is going
15	to help their program grow faster, even though it
16	costs more. Undoubtedly, the large CAFOs are
17	making a cheaper product that is being called
18	organic and so are the hydroponic producers making
19	a cheaper product. That is part of the problem.
20	But if we look at the EU, we can see
21	that that has not limited the growth of the organic

1	program. The other big thing that I think to look
2	at in the EU is there's tremendous support from
3	the governments for organic, real support. It
4	goes far beyond what the USDA is doing. And
5	they're working on training and education and
6	research. They're not subsidizing it. Well,
7	they're not subsidizing the terms of making the
8	food cost cheaper, but they are, for example,
9	subsidizing organic certification. In Denmark,
10	it's entirely free to be certified to organic.
11	The government carries that Bill. And I think our
12	government should. And at the very least, I
13	promote my dream of having any farm that grows is
14	less than a quarter million dollars, get free
15	certification. And I hope you all fight for that
16	in the next Farm Bill because we should have that.
17	CHAIR POWELL-PALM: Thank you for that
18	call out to Farm Bill, where a lot of good work
19	for organics should happen. And thank you for your
20	comments today, Dave.

MR. CHAPMAN: Thank you, Nate.

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1 CHAIR POWELL-PALM: Next up, we have 2 Gwendolyn Wyard, followed by Johanna Mirenda, and 3 then Cynthia Smith. Okay. Can you hear me 4 MS. WYARD: okay? 5 CHAIR POWELL-PALM: 6 I can. 7 MS. WYARD: All right. Now, give me just a moment here and I will get started. 8 All 9 Well, good afternoon, NOSB members, NOP right. staff and organic stakeholders in the virtual 10 11 gallery. My name is Gwendolyn Wyard and I'm Vice 12 President of Regulatory and Technical Affairs for the Organic Trade Association. 13 I'm commenting today on behalf of over 9,500 organic businesses 14 15 across all 50 states and our missions to protect and promote organic with unified voice. 16 My address 17 will comments excluded methods 18 terminology, the critical role of increasing 19 organic seed usage and the importance of staying 20 engaged in the rulemaking process from beginning to the end. 21

On excluded methods, OTA is in full 1 support of the subcommittee's proposal and we urge 3 NOSB to pass it as written at this meeting. our written comments after we state our support, 4 5 we go on and we talk about the importance of organic 6 seed usage and its connection to this proposal. 7 As Kiki Hubbard discussed earlier, organic operations are obligated to ensure non-organic 8 seed is in fact produced without excluded methods. 9 But this can be a challenge since its production 10 11 falls outside of the organic certification and 12 oversight system. So, the answer is more organic 1.3 seed as a requirement. It's OTA's long time position that our 14 15 best option for success is to focus on regulate 16 organic seed and put our energy into t.he development of organic seed production and organic 17 18 seed breeding. Organic not only helps keep GMOs out of organic, but it is the fundamental starting 19 point in building a thriving and resilient climate 20 organic smart system. To this end, we want to see 2.1

USDA prioritize the 2018 NOSB recommendation that updates the organic regulations to require increased organic seed usage over time.

We want to thank NOP for requesting feedback from stakeholders in a federal register notice earlier this year, and for sharing how to, I'm prioritizing upcoming sorry, standards development and for sharing its current thinking on the outstanding NOSB recommendations. Because only now can we really understand that NOP is not prioritizing the recommendation on increasing organic seed usage because they believe it's already addressed by the organic regulations. important information to understand. is Given this, we were able to bring forth important explain history and that NOSB initially recommended increased organic seed usage guidance, but NOP explained to NOSB that their guidance exceeded the regulations and that if NOSB wanted to recommend continuous improvement, the regulations would need to be revised. Thus the

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1	2018 recommendation, that's not being prioritized.
2	Unfortunately, the NOSB process and key
3	information that informed the recommendation is
4	not carried forward or maintained.
5	So, here's the moral of the story, the
6	called action standards development that begins
7	with NOSB, does not and should not end with NOSB.
8	When a recommendation is passed by a decisive
9	vote, then we need to stay engaged, carry the NOSB
10	record forward, and be active in each step of the
11	rulemaking process. And we need to be provided
12	with that opportunity. We need to insist that USDA
13	regularly update stakeholders with the status,
14	decision criteria and current positions on NOSB,
15	recommendation and advance rulemaking in a
16	transparent and fair process. Thank you.
17	CHAIR POWELL-PALM: Thank you very
18	much for your work and your comments today, Gwen.
19	Any questions from the board?
20	I appreciate how elevated the
21	discussion of organic seeds is becoming. I think

there's a lot of opportunity for organic farmers 1 as we talk about markets. If organic growers are 2 3 being given the chance to grow organic seed, that's also something that we realize as revenue retained 4 for the organic community. And I think that's 5 something that's just one of the many benefits as 6 we dive deeper into this. As always, appreciate 7 you, Gwen, and we will keep going. 8 9 All right. Thank you. Next up is Johanna Mirenda, followed by Cynthia Smith and then 10 11 Guiqui Wan. 12 MS. MIRENDA: Hey, good afternoon. I'm Johanna Mirenda, Foreign Policy Director for 1.3 the Organic Trade Association, OTA. 14 The Board is 15 working on 2024 Sunset Review, as background for new board members. We create electronic surveys 16 each year to help facilitate a thorough comment 17 18 review process. (Audio interference) and available to every NOP certificate holder and 19 measure the necessity of each material under 20 review. We ask about alternative to the material, 2.1

impact with the material or to be prohibited and 1 the rating of the overall necessity from 1 to 5, 2 3 with 5 being critical, would leave organic without Our comments include survey responses we 4 received up to the comment deadline and a bunch 5 more of comments that will continue to get the word 6 7 these materials, collect out on responses throughout the spring and summer and provide 8 9 updated data to you through the open docket in the 10 fall, so stay tuned. 11 On highly soluble nitrogen fertilizer, 12 OTA does not support the crops subcommittee's Many of the concerns that we identified 13 proposal. in our fall 2021 comments remain unresolved. 14 15 we're concerned that the proposal overburden these without meaningful benefit. The 16 farmers 17 proposal, to my understanding, would only be 18 effective to restrict 1 and any other yet to be 19 known novel nitrogen sources that might have 20 similar compatibility issues as ammonia extract and sodium nitrate, which we already dealt with 2.1

This

1 last fall.

approach does not address what we see as a major
underlying issue, which is to find the solution
for proactively identifying incompatible natural
substances and getting them in front of the board
for review instead of waiting for individual
petitions after commercial proliferation of those
products. In fact, the proposal would circumvent
the NOSB review of novel substances and give them
an automatic 20 percent allowance. So we still
need a proactive solution. We shared some ideas
last fall and we'll be happy to continue exploring
these options like improving the feedback loop
between the certifiers, material reviewers and NOP
when a material is flagged for a compatibility
concern and bringing MROs under NOP accreditation
to improve oversight of input approvals.
NOSB decisively passed recommendation
last fall to prohibit stripped ammonia and

responsible for demonstrating compliance.

Yes, every farm would be implicated and

1	concentrated ammonia. And we still support those
2	NOSB recommendations as we stated in our comments
3	last fall. In the fifth year of transparency and
4	accountability, we respectfully request that USDA
5	advances those recommendations through the rule
6	making process without delay taking the next step
7	to a proposed rule and comment period will allow
8	further analysis, the opportunity for the public
9	to lay in and answer questions and provide
10	information to USDA.
11	And as my colleague, Gwendolyn, just
12	mentioned, USDA need to provide this opportunity
13	to carry forward decisive NOSB recommendations in
14	a transparent and fair process and we as
15	stakeholders then ready to continue engaging in
16	the process at each step.
17	CHAIR POWELL-PALM: Stunning timing,
18	excellent work. I think we have question from
19	Brian for you.
20	MEMBER CALDWELL: Thanks, Johanna. I
21	was struck by your comment, your written comment

Τ	that the high hitrogen materials would require a
2	whole bunch of extra paperwork and review from
3	every farm for every crop probably, you know. But
4	I don't understand why that would be if there's
5	a very limited number of materials, you mentioned,
6	I think, two, either one or two that fall under
7	this. And what if a farmer just check a box saying
8	no, I don't use any of these, and then it eliminates
9	all of that works. So, I just would like to hear
10	how you folks are thinking that this would play
11	out because I
12	CHAIR POWELL-PALM: Oh, Brian, you're
13	on mute.
14	MEMBER CALDWELL: Did you catch the end
15	of what I had
16	MS. MIRENDA: I think so. Just how to
17	respond to the documentation requirements for
18	producers given that the proposal only addresses
19	a narrow scope of material?
20	MEMBER CALDWELL: Yes. And, again,
21	that it seems like, you know, the farmer can just

check a box saying, yes, I don't use these things 1 and then move on. 2 3 MS. MIRENDA: If it were that simple, it could certainly minimize the documentation 4 However, given that the regulatory 5 burden. language is specific to the crop, to carbon to 6 7 nitrogen ratio. And that data is not readily accessible to producers. There will have to be 8 9 a process for every farmer to go through, analysis of their own organic system plan and make 10 11 a determination of whether or not they should have 12 check that box or not. readily available 13 But having information to producers is the first step. 14 15 then given the narrow scope of material that this proposal would impact, you know, we want to see 16 the recommendations from last fall to prohibit 17 18 ammonia extract move forward. That would be a 19 prohibition. So, excluded from being impacted by 20 this 20 percent regulation. given the sodium 2.1 Also nitrate

recommendation from last fall, which would address
the 20 percent on sodium nitrate, it's still a very
limited number of materials, in fact only one is
identified in the proposal as being impacted,
guano. Therefore, the bang for the buck that this
proposal would deliver is very minimal and still
doesn't address what we want to see in terms of
proactive flagging of incompatible materials and
getting them in front of the board. So, we weigh
the pros and cons of this proposal and still feel
that there is unmet need to identify potentially
incompatible non-synthetic materials and get them
in front of your review. And there's no assumption
that we want to make that any potential
non-synthetic should get that 20 percent because
we saw with ammonia extract that a full prohibition
is what the board determined was appropriate.
MEMBER CALDWELL: Yes, good. Thanks.
But if we just take it one step further, I mean,
the magnitude review organizations need to
basically approve any substance that we're using

as a fertilizer anyways. So, why couldn't they 1 just be the kind of the clearinghouse of making 2 3 the determination as to whether a particular substance had a C to N ratio of less than 3:1? 4 And, again, you know, if I'm not using any of those, 5 I just check the box and move on. 6 It seems like with a little bit of effort, we can figure out a 7 system that will address this, you know, burdensome 8 9 paperwork issue. Yes, I think in order for 10 MS. MIRENDA: 11 this proposal to be effective to what they buy-in 12 from material reviewers in order to communicate the carbon to nitrogen ratio for operators to 13 readily demonstrate compliance. 14 Even so, we're 15 left without a proactive way to flag potential novel, non-synthetics that have compatibility 16 17 concerns to get this in front of this board for 18 review. 19 So, say this passes, then what? How 20 will we prevent the learning moment from last fall where the board was voting to prohibit material 2.1

1	impacted by the concentrated ammonia position that
2	had been only listed for 10 years? The problem
3	that will not be solved by the proposal.
4	MEMBER CALDWELL: Thank you very much.
5	CHAIR POWELL-PALM: Any other
6	questions for Jo? I have a question, Jo, that I
7	meant to ask Gwen as well. So, I'm going to put
8	it all on you to answer.
9	You live and breathe organic every day.
10	What are we missing about getting our markets to
11	be the norm, that 50 percent or we really have
12	everyday organic products available across the
13	board? And organics isn't niche at all. What do
14	we do? What are our barriers and how do we overcome
15	them?
16	MS. MIRENDA: Man, you're not going to
17	ask me a question about the National List.
18	CHAIR POWELL-PALM: I might get to
19	that, but.
20	MS. MIRENDA: It looks like this and
21	say, we need organic specific technical assistance

1	for every acquiring organic farmer everywhere,
2	especially underserved communities,
3	geographically isolated communities, we need
4	Federal policy for crop insurance to not just
5	incentivize organic producers and transiting
6	producers. We need concentration programs to
7	acknowledge and reward organic producers for
8	practices they are employing. A lot of the answers
9	fall outside of this board, which makes it ever
10	more of a herculean effort beyond what we have here.
11	So, I really encourage the direction the board
12	is going with looking at work agenda topics beyond
13	the National List because we need big solutions
14	beyond the organic regulations themselves to
15	really breakthrough.
16	CHAIR POWELL-PALM: Appreciate that.
17	Okay. Now, a little bit of National List talk.
18	Could you give me an example of a prohibited
19	natural that is not, say, arsenic, something that's
20	been dealt with before that would sort of put into
21	context where ammonia extracts would land?

1	MS. MIRENDA: Well, I think the only
2	update to the prohibited naturals list since it
3	was first developed and the original National List
4	was rotenone. I think that's been the one update.
5	But what I have been looking to as an example for
6	this scenario with ammonia extract is natamycin
7	because it's not totally prohibited, but it was
8	a non-synthetic that was started with a petition,
9	resulted in an NOSB recommendation to prohibit.
10	Went through the rulemaking process even though
11	it was really messy, but that act of advancing the
12	NOSB recommendation to the proposed rule, getting
13	that opportunity to take broader stakeholder
14	comment, engaging with other federal agencies as
15	appropriate and required by OFPA and then the USDA
16	explaining their rationale in the Federal Register
17	in their final decision. That's what we need to
18	make regular everyday practice for NOSB
19	recommendations, period. That's the USDA keeping
20	up their end of the public-private partnership.
21	So natamycin is an example of that model of

1	advancing it, even if its messy, you've got to,
2	you owe it to stakeholders and this partnership
3	we've created to keep it moving.
4	CHAIR POWELL-PALM: Thank you very
5	much for that. Yes, I think that's to honor at
6	this time everyone's putting into this process.
7	I think there's a lot of debate for that.
8	MS. MIRENDA: Yes, and what we do not
9	want is NOP making decisions or pre-committing to
10	not following through with rulemaking without that
11	public and transparent process.
12	CHAIR POWELL-PALM: Thank you. And
13	thank you for your comments today. Next up, we
14	have Cynthia Smith followed by Guigui Wan and then
15	Amber Sciligo. All right. Floor is yours,
16	Cynthia.
17	MS. SMITH: Okay. Thank you. My name
18	is Cynthia Smith. I'm a partner with Conn & Smith
19	Incorporated, which is a pesticide registration
20	consulting firm. I'm here representing Ingevity
21	Corporation. And I'm here to speak in support of

distilled tall oil.

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Next slide, please. FIFRA is the act 2 3 that regulates pesticides. It clearly defines active ingredient and inert ingredient. 4 definition for inert ingredient is very simple. 5 6 It's the ingredients that are not active 7 ingredients.

> slide, please. EPA Next issues tolerance exemptions for both active ingredients and inert ingredients. In 2004, which was the last year that EPA issued a list for the ingredients, distilled tall oil was on the list of three. And that was because at that time it was considered to not have a complete toxicological However, in 2017, EPA did issue the database. tolerance exemption for distilled tall oil. that tolerance exemption one demonstrates that distilled tall oil has a complete toxicological And two, that it has a complete EPA database. safety assessment. And three, that that safety assessment shows that it does meet EPA's current

high safety standards. If EPA were updating the 1 list at this point, then it would be on list 4B. 2 And we do know that Canada, unlike the United 3 States, does update its list periodically and 4 distilled tall oil is on Canada's list 4B and it 5 6 is organic in Canada. Next slide, please. 7 This slide show the contents of the register notice, having to do 8 9 with distilled tall oil. The thing that's important here is that distilled tall oil is 10 11 allowed for used sample of crops and animals. 12 in both cases, the clearance is for an inert ingredient. 13 Next slide, please. The Organic Food 14 15 Production Act regulates the use of synthetic agriculture. 16 substances in organic Ιt establishes the criteria under which synthetic 17 18 substances can be used. It does not differentiate 19 between synthetic pesticides, active ingredients 20 synthetic inert ingredients. and The same both 2.1 criteria apply to active and inert

Τ	ingredients, the same methodology applies.
2	There's no new science that is needed to evaluate
3	the distilled tall oil petition.
4	Next slide, please. The petition for
5	distilled tall oil has already been pending for
6	20 months. That petition goes into great detail
7	about how distilled tall oil meets all the criteria
8	of the Organic Food Production Act. We've also
9	submitted additional documentation to address the
10	errors in the technical report. Right now it's
11	delayed. Okay. Thank you.
12	CHAIR POWELL-PALM: Thank you for your
13	comments. Appreciate them. Any questions from
14	the board? Wood has a question.
15	MEMBER TURNER: It's actually a
16	question for you, Nate, or Michelle. Michelle,
17	would these summary slides be available after this
18	session?
19	MS. ARSENAULT: I can send them to you
20	and they will be posted in the docket with the
21	comments.

1	MEMBER TURNER: Thank you.
2	MS. ARSENAULT: You're welcome.
3	CHAIR POWELL-PALM: Brian, go ahead.
4	MEMBER CALDWELL: Yes, thanks,
5	Cynthia. You mentioned in the beginning that
6	basically materials, either an active ingredient
7	or inert. But I thought that tall oil could be
8	both, either an active ingredient or an inert
9	ingredient depending on how it was used.
10	MS. SMITH: That's a false statement
11	that came about from the original technical report
12	and then was reported again in the second technical
13	report. So, it's very clear, distilled tall oil
14	is exclusively an inert ingredient. And the next
15	speaker, Guigui Wan, will get into some of those
16	details.
17	MEMBER CALDWELL: Okay, great. Thank
18	you.
19	MS. SMITH: And if I can speak very
20	briefly to Nate's question, if you'll allow me,
21	in a minute.

1	CHAIR POWELL-PALM: Oh, sure. Which
2	question was it?
3	MS. SMITH: About how do we grow from
4	5 percent to 50 percent?
5	CHAIR POWELL-PALM: Please.
6	MS. SMITH: Yes, the inert ingredients
7	make the active ingredients work better. And if
8	you can think about your house, if the value of
9	your house was frozen in time at 2004, you know,
10	your house is worth well more than what it was worth
11	in 2004. That's where we are in the development
12	of products for use in organic agriculture. We're
13	stuck back in 2004. If you look at the many
14	comments submitted in support of the distilled tall
15	oil, you will see that there is a strong need for
16	additional inert ingredients to make your current
17	products work better. If you have better working
18	products, you'll have more organic growers.
19	CHAIR POWELL-PALM: Appreciate that.
20	We have a question from Logan.
21	MEMBER PETREY: Yes. I threw my hand

1	up. That was interesting thing that you say, so,
2	yes, a lot of people have discussed the concern
3	of adding inputs to the National List because of
4	getting away from the nature of organics and from
5	OFPA. But I think that we do need to consider,
6	there can be an innovative new inputs that come
7	on and they could be better than what is currently
8	on the list. And would you agree that we need to
9	focus more on the OSP, which actually, you know,
10	is in the OFPA to say that each farm or each organic
11	producer must follow the OSP and that is overlooked
12	by the certifier to make sure that they are
13	following those standards? Would you agree that
14	that actually is probably should be looked at more
15	or just to make sure that, you know, producers are
16	following that instead of limiting inputs that come
17	onto the list.
18	MEMBER SMITH: Yes. Can you define
19	OSP for me?
20	MEMBER PETREY: The Organic System
21	Plan?

1	MEMBER SMITH: Okay.
2	MEMBER PETREY: So, as an organic
3	farmer, I have to list everything that, you know,
4	that we're doing and including crop rotations and
5	cover crops, things like that to make sure that
6	our certifiers agrees that we are acting within
7	OFPA.
8	MEMBER SMITH: Well, I would say that,
9	again, there is a profound need for additional
10	inert ingredients for formulation of products for
11	the organic agriculture. And we've made the point
12	in the petition that we have satisfied all of the
13	requirements. Nonetheless, let's say the hurdle
14	to get there is very high. So, I think it would
15	be beneficial for the board as a whole to evaluate
16	what can the board do to facilitate the
17	availability of additional organic products that
18	simply work better?
19	CHAIR POWELL-PALM: I think Wood has
20	another question.
21	MEMBER TURNER: Nate, I just have a

1	comment, to be clear, and I don't want to get into
2	a debate about this, but to be clear, the hurdle
3	should be high for materials that are being
4	petitioned for use. So, I just want to say, in
5	comment to this statement you just made about the
6	high hurdle. It should be a high hurdle and that
7	the process is playing out the way that it's
8	designed to play out. And so I just want to make
9	that comment.
10	CHAIR POWELL-PALM: Appreciate that.
11	And thank you for your comments today, Cynthia.
12	MEMBER SMITH: Thank you.
13	CHAIR POWELL-PALM: Going forward, we
14	have Guigui Wan followed by Amber Sciligo and then
15	Angela Schriver. Guigui, the floor is yours.
16	MS. WAN: Thank you, Nate. Can you
17	hear me good?
18	CHAIR POWELL-PALM: We can.
19	MS. WAN: Okay. Thank you. Good
20	afternoon. My name is Guigui Wan. I work for
21	Ingevity as the Technical Product Lead. And today

1 I'm speaking here to support the Distilled Tall
2 petition.

Next one, please. So, although if you place a bottle of soybean oil next to a DTO, I mean, both have amber and oily appearance. So, they look quite similar, but actually they're very different materials. So, historically, I mean, DTO is often mistaken to be an oil because the word oil in the name. But as a matter of fact, DTO is not an oil by the structure or the function. DTO is primarily composed by natural occurring fatty acids and rosin acids while soybean oil and other vegetable oils are triglyceride acids.

Next one, please. So, oils as example, soybean oil are commonly used as insecticide because of its low surface tension. So, meaning they can spread evenly and easily insect and suffocate the insects. But oppositely DTO has much higher surface tension and are very comparable to the surface tension of water. So, imagine a drop of water on leaf surface. It doesn't spread,

it balls up. It's just really above water. This

is what happens if you spray a DTO on leaf surface.

3 So, fundamentally DTO cannot function as

4 insecticide. In addition, the recommended use

5 rate for DTO is much lower than soybean oil or other

oils used as insecticide. At such low use rate,

7 DTO can only function as inert.

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Next one, please. So, just like olive oil and neem oil, all the components in DTO are naturally derived. I mean, the difference is DTO from pine trees. DTO is not а substance. It is a UVCB, meaning it is created from biological materials naturally occurring in the environment. And it is already proven to be humans, environment in various very safe to We repurposed DTO following the applications. sustainable slight processes and onlv verv modifications to ensure that it can be reused and can bring benefits to the overall health of If DTO was not used properly, it will ecoloav. be burned or put into landfill. DTO is already

1	used in conventional crop protection and it
2	demonstrates many application benefits, stated
3	clearly in our petition.
4	Next one, please. So, in summary, DTC
5	is extremely valuable natural origin biological
6	material. It is generated from material,
7	otherwise will be incinerated or landfilled. It
8	is very safe to human environment and bring many
9	sustainability benefits and support the overall
LO	health of the ecological systems. And thank you
L1	so much for the attention today.
L2	CHAIR POWELL-PALM: Thank you very
L3	much for your comments and joining us. Any
L 4	questions from the board? Not seeing any, we will
L 5	continue on. Thank you, again, Guigui.
L 6	Appreciate your time. We have Amber Sciligo next
L 7	followed by Angela Schriver and our last speaker
L 8	today is going to be Leslie Touzeau.
L 9	MS. SCILIGO: Great. Thanks. Nate,
20	can you hear me?
71	CHAIR POWELL-PALM. We can Thank

1 you. Go ahead.

2 MS. SCILIGO: Okay, great. Hi, 3 everyone. My name is Amber Sciligo. And I am the Director of Science Programs for the Organic 4 are a nonprofit organization that 5 6 communicates research on organic and we also 7 academic collaborate with and governmental institutions to help fill gaps in a scientific 8 9 knowledge. I want to first say thank you to the materials subcommittee for all its hard work and 10 11 continuous consideration of organic research 12 And while we support and appreciate the needs. large diversity of priorities that are currently 13 presented today, 14 I would like to ask 15 subcommittee to please also include the following briefly summarized research priorities. 16 17 First up, I have cultural and social 18 barriers to organic adoption. We know that 19 production challenges, yields and other economic 20 barriers to transition are significant. And there

are also lesser defined cultural and social

1	barriers that can prevent some farmers from using
2	organic practices and/or pursuing organic
3	certification, even when they have already adopted
4	organic practices. We need more research to
5	identify these barriers so that they can be
6	addressed and overcome. And we recommend that
7	priorities is specifically placed on assessing the
8	potential societal benefits and/or drawbacks of
9	organic certification for farmers, their
10	communities and existing consumers and the
11	assessment of current limiting factors to the
12	appeal and adoption of organic certification.
13	Next is assessing impacts of
14	inadvertent chemical contamination across the
15	supply chain. We do applaud the NOSB for including
16	the topic of prevention of GMO crop contamination,
17	but the issue of contamination is not unique to
18	genetically modified material. And we request
19	that chemical contamination be included as well.
20	Next is the comparison of pesticides
21	and antibiotic residues in organic and non-organic

1 products. We do need more research on the impacts of organic on exposure to residues 2 and the 3 connections between these exposures to residue comparisons 4 outcomes. And mav especially important for popular imported products 5 that are grown in countries that currently use 6 pesticides that have previously been banned in the 7 U.S. or may have less stringent rules for pesticide 8 9 application and monitoring. Next is quantifying nutritional values 10 11 of organic animal products such as dairy, meat and 12 We were pleased to see the inclusion of 13 factors impacting organic crop nutrition. However, the discussion focuses on fruit and 14 15 vegetables, and we encourage the committee to include animal products as well. 16 17 Next is measuring impacts of organic 18 crop production on water quality, specifically 19 related to pesticide residues in water and how 20 organic can keep pesticides out of waterways. finally, we have assessing benefits and risks of 2.1

1	livestock integration into crop rotations. There
2	are well-known benefits of animal crop integration
3	and where research is needed to examine the impacts
4	of the use of livestock for cover crop grazing,
5	especially on ecosystem health and food safety.
6	CHAIR POWELL-PALM: All right. Thank
7	you. Appreciate your comments today. And
8	appreciate all the work the Organic Center does.
9	Do we have any questions for Amber from the board?
10	You must have covered it all, so appreciate it.
11	MS. SCILIGO: Thank you.
12	CHAIR POWELL-PALM: All right. Thank
13	you for your time. Moving on, we're going to have
14	Angela Schriver and then Leslie Touzeau as our last
15	speaker today. So Angela, the floor is yours.
16	MS. ARSENAULT: Angela, I see you're
17	just on the phone. If you don't have a mute button
18	on your phone, you can type star six. Oh, there
19	you go. I think you're unmuted now.
20	MS. SCHRIVER: Can you hear me now?
21	CHAIR POWELL-PALM: We can.

1 MS. SCHRIVER: You can hear me. Oh, 2 thank you. All right. I'm Angela Schriver from 3 Schriver Organics. We are members of OEFFA and OEFFA Grain Growers Chapter. On highly soluble 4 5 nitrogen fertilizers, we are proponents 6 limiting HSN, fertilizers, carbon to nitrogen 7 ratios to three to one with a 20 percent input This limit will ensure the focus is still limit. 8 on soil health management and will prevent reliance 9 on these inputs. And there's effort to maintain 10 11 and improve the soil's fertility. These types of 12 fertilizers will become unnecessary and becoming unnecessary should be the goal. 13 And this will easily be apparent when looking at the organic 14 15 management practices of a farm. We want to be sure that the NOP is not inadvertently encouraging a 16 17 system that mimics a conventional ag system. 18 On the organic link system, we support 19 the creation of an organic link system, centralized database that would allow for real time 20 traceability of transactions, import certificates 21

and transaction certificates as a tool for fraud 1 prevention. And as we've heard, the current tools 2 3 for fraud prevention are not 100 percent reliable. As a farmer that is participating in a voluntary 4 set of standards, it is important to create a level 5 6 playing field for all potential participants. 7 Additionally, I don't foresee any extreme burdens for farmers as it's just an electronic version of 8 9 information that we are currently providing on paper now. An organic link system seems to be a 10 11 logical extension of the strengthening organic 12 enforcement proposal rule, which is intended to protect the integrity in the organic supply chain, 13 which we're still eagerly awaiting the publishing 14 15 of. And timing of meetings, not only do I 16 appreciate the opportunity to voice my thoughts 17 18 and concerns on organic agriculture with the NOSB, 19 I genuinely enjoy hearing the thoughts and concerns 20 of others in my organic community. It is the knowledge of others that leads to my deepening, 2.1

1	understanding and appreciation of organic
2	agriculture as a farmer and as a consumer. I
3	encourage rotating the timing of the meetings ir
4	order to hear from a wide variety of producers.
5	General comment. Previously I
6	commented on my concern with Harold Austin's
7	remarks made about supplying consumers with ar
8	organic version of conventionally produced
9	products in order to compete with the conventional
10	market. Today, he again used the term compete.
11	I'm unsure of why an organic farm would feel
12	competition with a conventional farm. I would
13	guess it is based on consumer interpretation or
14	expectation. Based on that presumption, I would
15	suggest prioritizing consumer education instead
16	of wandering down the organic standards. I would
17	also pinpoint consumer education as the key to
18	organic agriculture's growth. I know the more
19	educated I am on organic agriculture, the more
20	adamant I am on consuming and growing organics.
21	Thank you for your time.

1	CHAIR POWELL-PALM: Thank you so much,
2	Angela. Do we have any questions for Angela?
3	I have one. Angela, when you think
4	about your crop rotation, you mentioned that one
5	of the goals is to try to have more and more
6	nutrients cycled on the farm and fewer inputs.
7	Did I get that right?
8	MS. SCHRIVER: Correct.
9	CHAIR POWELL-PALM: Okay. And so when
10	you're thinking about your crop rotation, do you
11	think about that you need to get the most valuable
12	cash crop off every field every year or do you think
13	of it as it's some years you're feeding the soil,
14	some years the soil's feeding you? And so it won't
15	always be the highest value crop off every year,
16	but this give and take to keep the soil whole?
17	MS. SCHRIVER: That is absolutely
18	correct. And I would add, if I were trying to
19	obtain the largest cash crop on every field every
20	year, that would not be sustainable in the
21	long-term. Would it give me a bump in income for

Possibly 2 years, yes, but would I be able 1 a year? to continue as organic agriculture 2 long-term 3 without considering everything else, the soil health, the fertility, having those off years where 4 I'm just planning a cover crop to regenerate the 5 6 soils, et cetera. You know, my goal is long-term. 7 CHAIR POWELL-PALM: Appreciate that. Would you mind, just anecdotally, would you tell 8 9 us what your crop rotation is? 10 MS. SCHRIVER: Yes. So, we live in 11 North Central Ohio, so we have had a lot of rain 12 for the last couple of years. But generally 13 speaking we've been doing corn, soybeans, sunflowers and then a year, our plan is to do a 14 15 year of cover crops in that field. So, it has an entire year, and that could be a summer planting 16 of cover crops and then terminating that and doing 17 18 a winter planting of cover crops that'll make it 19 through the winter. So, we're set up for corn the 20 following year. That being said, whenever we can squeeze in a small grain, weather allowing, that 21

1	is also our goal. And we are always looking for
2	more crops to add to the rotation as well because
3	we know, that's just keeping our soil healthy,
4	upping that fertility so that we can stay in
5	agriculture long-term.
6	CHAIR POWELL-PALM: Thank you. I
7	know Amy has a question for you as well.
8	MEMBER BRUCH: Yes, I do. Thanks,
9	Nate. Thank you, Angela. I really appreciate
10	your time. I know as a farmer, you're extremely
11	busy this time of year. So, your contributions
12	today are really important. I appreciate the
13	comments on the highly soluble nitrogen. I wanted
14	to ask you a little bit more on, just one of our
15	topics for the CACS committee and you briefly
16	talked about the organic link system. I believe
17	you said you're affiliated with OEFFA, sorry about
18	that, but, yes, OEFFA, sorry about that. Lots of
19	acronyms that were thrown around today, but anyway.
20	MS. SCHRIVER: I know.
21	MEMBER BRUCH: I wanted to ask you, I

know that crops are present on your certificate as well as the products that you produce. How many of your buyers are interested in having this information? Are there several that have been asking you for, you know, just verification on your, the crops that you grow and acres that you have?

Unfortunately, no, and MS. SCHRIVER: I emphasize the word unfortunate as in sometimes Ι question why they wouldn't be even I feel that, you know, we sell our concerned. crops to typically the companies buying it. long as they have their boxes checked, they're doing the right thing, which is just the organic certificate, the bill of lading, the clean transport certificate, they file that and they forget about it. And there have been times where I have definitely thought, you would think they would be more concerned, but I also know some of these buyers are also buying, grains been imported, and it's substantially cheaper. And they should

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1	probably question whether or not it's legitimately
2	organic, but again, they don't. They check their
3	boxes, so they won't get into trouble and they move
4	on.
5	CHAIR POWELL-PALM: One quick
6	follow-up question to that. Angela, you are
7	certified by OEFFA, correct?
8	MS. SCHRIVER: Correct.
9	CHAIR POWELL-PALM: Okay. And OEFFA
10	is one of those certifiers who does put the acres
11	by crops on the certificate, is that correct?
12	MS. SCHRIVER: Yes.
13	CHAIR POWELL-PALM: Okay. And do you
14	feel like there's any concern or do you feel like
15	that works for you in your system to have that
16	information disclosed to anyone who gets your
17	certificate?
18	MS. SCHRIVER: I don't feel like I'm
19	hiding the amount of acres I grow in anything.
20	I'm more than happy to provide it. I would be more
21	than happy to provide my yield results as well.

1	None of that information do I feel like I would
2	need to hide from my neighbor or hide from my
3	husband or hide from the buyer of my products.
4	I think that is information that should be readily
5	available to whomever deems it necessary or would,
6	you know, even be curious to check.
7	CHAIR POWELL-PALM: Really appreciate
8	your insights there. And I just want to echo what
9	Amy said. I know it is an inconvenient time to
10	comment, but I so appreciate every farmer and
11	everyone, but especially those farmers who should
12	be in the fields, taking the time to speak with
13	us today. So thank you.
14	MS. SCHRIVER: We definitely
15	appreciate all of the board's time as well. So,
16	thank you guys as well.
17	CHAIR POWELL-PALM: Absolutely. All
18	right, folks, wrapping it up. We are going to end
19	today hearing from Leslie Touzeau and then we're
20	going to meet again on Thursday. So, Leslie, the
21	floor is yours.

1 MS. TOUZEAU: Wonderful. Can you all hear me? 3 CHAIR POWELL-PALM: We can. Yes. All right. 4 MS. TOUZEAU: Good My name is Leslie Touzeau and I'm the 5 6 Material Review Manager for Quality Certification 7 Services. Thank you for this opportunity to provide comments to the board and welcome to new 8 9 board members. I hope we all have a chance to 10 gather in-person in the near future. Please refer 11 to QCS' written comments for our thoughts on prop 12 and livestock materials on this meeting's agenda. I would like to spend my time elaborating on our 1.3 comments about carbon dioxide and its addition to 14 15 the National List at 205601. We were pleased to see at the fall of 16 17 2021 NOSB meeting that the board decided to send 18 the carbon dioxide proposal back to subcommittee 19 in order to vote on the two proposed uses independently. 20 However, the current proposal does not include any additional discussion of the 2.1

potential use of supplemental CO2 as a plant amendment in greenhouses and indoor facilities. The petition is requesting the allowance of synthetic CO2 to adjust water pH by dissolving carbon dioxide and water, creating carbonic acid and allowing that irrigation water to be used on We understand that acidifying water does neutralize minerals and hard water and has the secondary effect of preventing scale and build up in the irrigation lines. But the heart of the petition and the proposal document is the use of carbon dioxide to adjust water pH as a benefit to the crop by increasing nutrient availability and plant health. Carbon dioxide adjust used to irrigation water pH is similar in function to the listing for sulfurous acid at 205601J11, which is used to reduce the pH of irrigation water for saline or alkaline soils. Like sulfurous acid for water pH adjustment, synthetic carbon dioxide for water pH adjustment would fit with the listing at 205601J

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as a plant or soil amendment. With the listing at 205601J as a plant or soil amendment, synthetic carbon dioxide will also be allowed for use as supplemental CO2 for crops. Currently in some organic production systems, non-synthetic supplemental carbon dioxide is pumped into the air of indoor facilities and green houses to improve plant growth and fruit production.

mentioned in written As we our comments, QCS supports the addition of carbon dioxide to the National List for this use, as it would be an additional tool in our producers' However, this use is different from the toolbox. proposed use as a water pH adjuster. And there is no discussion in the proposal document regarding supplemental carbon dioxide used to photosynthesis in greenhouses. We understand that this use is not the subject of the petition, but without a specific annotation at 205601J, supplemental CO2 could be considered a plant amendment and it would be allowed.

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1	It seems that carbon dioxide could be
2	used in three different ways if recommended for
3	addition to 205601A and 205601J as an irrigation
4	cleaner, a water pH adjuster and a supplemental
5	plant amendment in indoor facilities. Only one
6	use is discussed in the proposal and evaluated
7	using off of criteria. QCS believes a thorough
8	review process of the material is necessary and
9	we recommend sending the proposal back to
10	subcommittee to allow for adequate evaluation,
11	discussion and stakeholder feedback through the
12	public comment process for all potential uses of
13	synthetic carbon dioxide.
14	Thank you.
15	CHAIR POWELL-PALM: Thank you very
16	much for your comments today. Logan has a
17	question.
18	MEMBER PETREY: Hi. Yes, just a quick
19	comment. I appreciate the comment, the writter
20	comment and the oral comment, very clear, and we
21	will take that into consideration, great

1	consideration. Thank you so much.
2	MS. TOUZEAU: Great. Thank you.
3	CHAIR POWELL-PALM: Kyla?
4	MEMBER SMITH: Hi, Leslie. I actually
5	wanted to ask you about your comments related to
6	highly soluble nitrogen fertilizers because I'm
7	trying to sort of, you know, connect the dots
8	between comments that are saying that it's going
9	to be overly burdensome for producers and
10	certifiers and inspectors and comments saying like
11	just check a box. So, bear with me for just a
12	minute, Nate. I'm sorry, but
13	CHAIR POWELL-PALM: Go ahead. Go
14	ahead.
15	MEMBER SMITH: Okay. As a material
16	specialist, Leslie, I was like, oh, this is how
17	I think it would go. A producer puts input on their
18	inputs list that comes to the certifier, which then
19	we would need to evaluate first because they,
20	especially if it's a blended fertilizer, they're
21	not going to know the ingredients and whether or

not their fertilizer contains guano or whatever 1 And then we do the work, we'll call the 2 else. 3 manufacturer, get all like the ingredients to see And then we would the end ratio, all the things. 4 5 probably put a restriction on that material saying there's a C to N ratio of less than three. 6 need to do extra documentation or whatever. 7 So, then they would need to then provide 8 you know, verify and have documentation 9 That's like in the chart, which is, 10 available. 11 are in the chart, that's in the proposal. 12 does that sound like the practice that you at QCS would follow thus far? 1.3 Yes, that sounds about 14 MS. TOUZEAU: I mean, we currently and I think I've put 15 this in our written comments, but we currently, 16 we have like a sodium nitrate worksheet that we 17 do have producers fill out that kind of takes into 18 account what crop they're using, you know, either 19 if it's a single ingredient sodium nitrate product 20 or if it's a blended product that contains sodium 2.1

nitrate, we can determine the percentage of the product that, and how much nitrogen is being contributed. But we have them provide the information about what crop, you know, what the nitrogen needs are for that crop. And then there are some calculations that we've built into that spreadsheet.

And so I think that what I've tried to convey in our written comments is that this is certainly possible. It just would require, you know, a significant more work on our part. that doesn't necessarily mean that it should keep it from passing. But we just wanted to make sure that the board understands. And also, I think, you know, when it comes to looking at especially a blended fertilizer without a list saying, you know, sodium nitrate and quano are the two, you know, C to N ratio under three that we need to look Without that list, it almost becomes out for. need to evaluate like. do we every single ingredient in that fertilizer to determine what

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1	the CN ratio is? Because we don't, you know, we
2	don't know if it's a blood meal. You know, blood
3	meal can sometimes be on the edge of that ratio.
4	And so we, you know, so then we end up having to
5	ask all of this additional information about a
6	fertilizer that might have, you know, 10, 15
7	ingredients and so that takes time, that takes the
8	manufacturer time. It takes time for us to then
9	get to complete the review and then get back to
10	the client. So, I mean, there's just going to be
11	additional work if that proposal is to move
12	forward.
13	MEMBER SMITH: And then that
14	additional work could also perhaps be moot sort
15	of if the producer is using it at a rate where it
16	
17	MS. TOUZEAU: That's under 20 percent.
18	MEMBER SMITH: Right. Where it just
19	like inherently would be under
20	MS. TOUZEAU: Right. Like if guano is
21	1 of 20 ingredients, it's, you know, a very small

1	percentage of the formulation. Then, you know,
2	they would have to use, you know, hundreds of pounds
3	of the fertilizer in order to reach that 20 percent
4	nitrogen need. So, yes, I think that that's the
5	balance that you all are kind of wrestling with.
6	MEMBER SMITH: Thank you.
7	MS. TOUZEAU: Yes.
8	CHAIR POWELL-PALM: Thank you for
9	asking that, Kyla. And thank you for your answer,
10	Leslie. Brian has a question.
11	MEMBER CALDWELL: Yes. Thanks,
12	Leslie and thanks Kyla for leading this one. But
13	I'm still struggling with this too, but why
14	couldn't the material review organizations be
15	involved in this and basically make that, I mean,
16	so that everybody didn't have to redo it every time,
17	make that determination for fertilizing materials?
18	MS. TOUZEAU: You mean like, make the
19	determination of kind of what qualifies as a
20	MEMBER CALDWELL: Well, yes, for
21	instance if there's a blend and it's got something

1	in it that's, you know, below three to, you know,
2	a 3.0 C to N ratio, flag it so that the producer
3	knows and the certifier knows. It just seems so
4	kind of logical and easy, but maybe I'm missing
5	something.
6	MS. TOUZEAU: So, you mean like if the
7	blended fertilizer as a whole has a CN ratio of
8	3 to 1 or below or individual components?
9	MEMBER CALDWELL: No, no, the
10	individual component because that's what has to
11	be evaluated. Right?
12	MS. TOUZEAU: Right. And so, I guess,
13	I'm saying that, you know, according to the
14	proposal and the information that you all provided
15	that right now that looks like mainly sodium
16	nitrate in guano. But there are some other
17	materials that I think if the, you know, if the
18	evaluation is just based on what is the C to N ratio,
19	there are some materials that might kind of come
20	close to 3 to 1. And so, because we don't know,
21	I mean, we certainly know some materials are

Τ	definitely not 3 to 1, but without a kind of
2	definitive list, so to speak, or at least some
3	consensus amongst the material review
4	organizations and certifiers, you know, we could
5	be having to evaluate each ingredient and find out
6	it's CN ratio for each ingredient because we can't
7	assume every time that a fish fertilizer or a soy
8	hydrolysate or a blood meal or a guano, you know,
9	unless there's a consensus that we assume that all
10	of those different ingredients are not 3 to 1.
11	If there's not a consensus, then we have
12	to constantly check to determine if, you know, if
13	that particular ingredient being used in that
14	particular fertilizer qualifies as a 3 to 1 ratio.
15	MEMBER CALDWELL: So, well, again,
16	sorry to belabor this, but the material review
17	organizations already have to check these
18	materials, right? They have to do it. So, why
19	won't this just be part of the evaluation of the
20	material and that information written right on
21	their certificate?

1	MEMBER SMITH: Nate, can I comment or
2	should I just save this for the board discussion
3	because I can answer Brian's question?
4	CHAIR POWELL-PALM: Sure. Go ahead.
5	
6	MEMBER SMITH: Not all fertilizers are
7	reviewed by material review organizations; not all
8	fertilizers are reviewed by AMRI or WSDA. Lots
9	of fertilizers are submitted to certifiers, and
10	we do that evaluation for compliance.
11	MEMBER CALDWELL: Right. And a lot of
12	other products too, but there's a strong reason
13	to use a material review organization. And with
14	NOFA New York, we have to pay, I don't know, \$75
15	an hour for it, if our material needs special review
16	and, you know, there's reason to do that to use
17	the MRO, so let's do it. I don't know.
18	MS. TOUZEAU: And I, just a follow-up,
19	you know, there is a kind of an incentive to use
20	materials that are, you know, already reviewed by
21	AMRI or WSDA. But that doesn't mean that all

Some of them find materials 1 producers do that. that are local to them or, you know, so there's 2 3 always going to be additional materials that need to be reviewed by certifiers like us. 4 especially some of these more complex fertilizers 5 6 that have mini-ingredients or custom blends or any of these types of materials, it's just going to 7 require more work. For us, you know, I work for 8 9 QCs, we're not a material review organization per We review materials for our clients. 10 se. 11 And so it's just me and one other person 12 doing this work for all of our, you know, 1,000 clients. And so it's something to consider that 13 it would take, it would kind of put a bit more of 14 15 a burden on certifiers. But, again, that's, you know, that's kind of a needle to thread when 16 17 thinking about, you know, the benefits of the 18 organic integrity of this proposal versus kind of 19 the extra work, so --20 CHAIR POWELL-PALM: Really appreciate insight. We'll end today with Logan's 2.1 that

1 question.

Thank you. 2 MEMBER PETREY: I'll make 3 And so when you talk about the blood meal and the fish, we've identified on the proposal 4 that they are less than a 3 to 1 ratio. 5 But are 6 you saying that there may be some products that have a CN ratio that are higher 3 to 1 and will 7 make them subject to the 20 percent and that can 8 9 vary between batches or so of product. Do you find 10 that or do you think that that is potential? 11 MS. TOUZEAU: I haven't been looking 12 at CN ratios for these types of ingredients. I do think reading through some of the public 1.3 comments from some of the MROs that there was, I 14 did see some mention of like, you know, potential 15 for like a soy hydrolysate product to possibly have 16 a ratio that's lower than 3 to 1 or, you know, I 17 18 know that blood meal and some fish products are very close to that 3 to 1 cut off. And so there, 19 you know, it's possible that there are some 20 instances, depending on production, manufacturing 2.1

1	where they may kind of inch close to that line,
2	which is why I think, you know, having a list or
3	at least some consensus among certifiers, whether
4	that's the best practice of like these are the
5	starred ingredients. These are the things we want
6	to look for to determine, you know, these are the
7	things that we need to definitely check out. These
8	are the things that we need to see what that C to
9	N ratio is. And then if it would be subject to
10	that 20 percent restriction.
11	MEMBER PETREY: Thank you. I
12	appreciate your time.
13	CHAIR POWELL-PALM: Thank you, Leslie.
14	I really appreciate you taking on so many
15	questions right at the end here, and it is
16	appreciated. So, thank you for your time and
17	insights today.
18	Well, folks, we're going to do this
19	again on Thursday. So, that concludes our public
20	comments webinar for day one of the spring 2022
21	meeting. Thank you to everyone who provided

1	comments today. This is what makes our community
2	great. And we're going to reconvene Thursday,
3	April 21st at noon Eastern. So, I hope to see
4	everyone back here and we'll do it all again. All
5	right. Thank you.
6	(Whereupon, the above-entitled matter
7	went off the record at 5:18 p.m.)
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UNITED STATES OF AMERICA
DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
NATIONAL ORGANIC PROGRAM

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NATIONAL ORGANIC STANDARDS BOARD

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PUBLIC COMMENT WEBINAR

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THURSDAY APRIL 21, 2022

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The Board met via Videoconference, at 12:00 p.m. EDT, Nate Powell-Palm, Chair, presiding.

MEMBERS PRESENT

NATHAN POWELL-PALM, Chair
AMY BRUCH
BRIAN CALDWELL
GERARD D'AMORE
CAROLYN DIMITRI
LIZ GRAZNAK
RICK GREENWOOD
KIMBERLY HUSEMAN
MINDEE JEFFERY, Vice Chair
ALLISON JOHNSON
DILIP NANDWANI
LOGAN PETREY
KYLA SMITH, Secretary
WOOD TURNER
JAVIER ZAMORA

ALSO PRESENT

NEAL R. GROSS

MICHELLE ARSENAULT, Advisory Commmittee
Specialist, National Organic Program
JARED CLARK, National List Manager, National
Organic Program
DAVID GLASGOW, Associate Deputy
Administrator, National Organic Program
ERIN HEALY, Division Director, Standards,
National Organic Program
ANDREA HOLM, Materials Specialist, National
Organic Program
DEVON PATTILLO, Acting Assistant Director,
Standards, National Organic Program
JENNIFER TUCKER, Deputy Administrator, National
Organic Program; Designated Federal Officer

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

2 (12:00 p.m.)3 MS. ARSENAULT: Welcome everyone to the National Organic Standards Board, day two of 4 5 the public comment webinar. If you're on the phone 6 with us only, you won't see the slide that's on 7 the screen, but I'm going to just run through the slide really quickly. We -- there's phone numbers 8 on the screen, so if you are having audio issues 9 and you want to drop off the video and just dial 10 in on the phone, you're welcome to do that as well. 11 12 There's several phone numbers to choose from. 13 We ask that you please do stay on mute. Chat is enabled and you'll find that in the center of your 14 Zoom task bar, wherever that is on your screen. 15 And you're welcome to chat with each other, relay 16 technical information or technical difficulties 17 to NOP. But chats are not part of the public 18 19 record, so you can chat with each other but the board is not going to be request -- answering 20 And closed captioning is 21 questions. Sorry.

available in Zoom by clicking the live transcript

button or the CC button, which I can't see -- but if you -- you can control it on your end so you can see it or not see it as needed. You can also change the font size. So if you click on that button, it'll give you the option to play around with the settings. And thank you for one of my co-workers who just requested that I turn on the live captioning. Please don't use the raised hand feature, which is under the reactions button at the -- in your task bar at the bottom of the Zoom window. All commenters had to register ahead of time and will be called on in turn by their board chair.

You can customize your own view in Zoom by going to the upper-right corner, there's a little Hollywood squares or Brady Bunch, depending on what generation you're from. The view button, and you can change what you see on the screen. We're going to pin my camera, which will be pointed at the speaker-timer. And we'll highlight the current speaker on the screen. But you're welcome to change the view for yourself on your end. If

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you're having technical problems, you can contact Zoom directly by going to support.zoom.us, in the upper-right hand corner of the screen, there's a contact us button and you can live chat if you need to. The webinar is being recorded and we're going to have a transcript, a written transcript, that will be available after the meeting concludes next week and it's usually a couple of weeks after that until we get the official transcript. And the transcription is on the call -- transcriptionist is on the call with us today.

For speakers, so Jared, can you move to the next -- thank you. Much faster. Speakers make sure that your name is displayed in your video tile correctly, just so we can locate you and make sure that your mic is unmuted when it comes time for you to speak. We do ask that everybody on the call please stay on mute until you're called on to comment, and then you can unmute yourself and turn on your camera if you like. It's optional. You don't have to be on camera. The mic and camera icons, widgets are on the bottom left of the Zoom

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taskbar. If you're on the phone only and your phone doesn't have a mute button, you can use star six to mute and unmute yourself, it toggles back and forth. We can also unmute you from our end if you're having issues and give you a second to get unmuted before you start.

the beginning of your comment, please state your name and affiliation for the That's the transcriptionist record. SO capture it and then I'll start the timer when you're ready to start your comments. Each commenter has three minutes to speak and we will have the timer. I'm going to switch my camera here so you guys will see the timer. We'll start the timer and then there's a beep at the end of the three minutes. just ask that you please finish your And then the chair will invite NOSB sentence. members to ask questions of you at the end of your comments, so don't immediately hit your mute button as soon as you're done your comment. We -- there, may be follow-up questions. All right. going to turn it over to Jennifer Tucker, the deputy

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administrator of the National Organic Program, so she can officially kick the meeting off. Thank you, Jenny.

TUCKER: All right. Thank you, And thank you for -- to everybody who Michelle. is here today. My name is Jennifer Tucker, I'm the deputy administrator for the National Organic So first a welcome to all our National Program. Organic Standards upward members. We are continuing our fourth online meeting together. And we continue to be very, very pleased and happy to have such an engaged audience in this ongoing I'd like to particularly welcome forum here. again our new board members; they're four of them, Liz Graznak from Missouri, Allison Johnson from California, Dr. Dilip Nandwani from Tennessee, and Javier Zamora from California. And so they started their work on the board this spring and I would like to all of us practice our Zoom applause skills, so waiving two hands in the camera to thank them for all the work that they've already done and will continue to do here. To our public

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cementers, again, I do want to thank you for 1 engaging in this process, and I thank our audience, 2 3 you are an important part of this process and we're glad that you're here to listen in. 4 This webinar continues the series of 5 6 virtual webinars that are occurring over multiple 7 We are in our second day this week and there davs. will be three days next week. Meeting access 8 information for all meeting segments is posted on 9 10 the NOSB meeting page on the USDA website. 11 Transcripts for all segments will be posted once 12 completed. And so this meeting, like other meetings of the National Organic Standards Board 13 will be run based on the Federal Advisory Committee 14 15 Act and the board's policies and procedures manual. I'm going to act as designated federal officer 16 for meeting segments. And Nate Powell-Palm will 17 18 continue to serve as our board chair and will take 19 the helm for this session once I'm done here. So as I noticed -- noted as I started 20 the last NOSB meeting and on Tuesday and an open 2.1

transparent process mutual respect is critical.

1	We do ask in advance to avoid personal attacks
2	in and disparagement. Please engaged with grace.
3	I wanted to append that comment with just a
4	personal observation. For folks to have given
5	public comment in the past, you know, it can be
6	a little intimidating, a little scary to get up
7	for your three minutes to testify not only to the
8	board and to the program, but to all your, kind
9	of, peers. And so that can be I admire people
10	who take that stand for those three minutes,
11	because for many it can be it's a lot going on.
12	So I invite our audience that while we keep the
13	chat button the chat active, there have done
14	a few times, it's not just this meeting, but
15	previous meetings where when somebody is speaking,
16	people start sort of chatting in rebuttals or are
17	not some frankly mean chats while somebody's
18	giving a testimony. I'm going to ask that you
19	monitor that. So monitor yourself here. So we
20	do again, keep the chat open for people to be able
21	to converse. But when somebody's testifying,
22	please give them the space and the safety, to be

able to do that in a supportive way. So if you want to add a comment later on, or something that's important to you, do that. But just something to consider as a, sort of, a personal request in monitoring with the chats. So again, engage with grace and that's not only verbally, but with each other in the written form.

So I got to close by again, thanking the National Organic Program team. This is an amazing team, and I am honored to work with them every single day. This team is why I show up. This community is why I show up. That I have now been with the Organic Program for ten years. passed my ten-year anniversary about six months ago, actually, first as associate and then as deputy. And it continues to be an honor to listen to you, to work with you, and to try to support you the best I can and to support our team the best So I want to acknowledge Michelle, who I've I can. now worked with almost ten years. Jared Clark, Devon Pattillo, Dave Glasgow, and our standards director, Erin Healy. Andrea Holm is with us and

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1	on there are other NOP staff on the line who are
2	listening and helping behind the scene. So I'd
3	like to give them a round of applause as well.
4	So thank you. I'm going to now hand the mic back
5	to Michelle who's going to do the roll-call of NOSE
6	members. So thank you again for being here. We
7	appreciate your engagement.
8	MS. ARSENAULT: Jenny, my camera's
9	facing the speaker timer, so I'm just going to be
LO	on audio. Nate Powell-Palm.
L1	CHAIR POWELL-PALM: Present.
L2	MS. ARSENAULT: And so let me just back
L3	up one second. We're just go do a roll. It's a
L 4	way to check everybody's mic and camera and it's
L5	also for the transcriptionist just so you know.
L 6	Mindee Jeffery.
L7	MEMBER JEFFERY: I'm here.
L 8	MS. ARSENAULT: Excellent. Welcome.
L 9	Kyla Smith.
20	MEMBER SMITH: Hi, everybody.
21	MS. ARSENAULT: Hi there. Amy Bruch.
22	MEMBER BRUCH: Morning, everybody.

1	MS. ARSENAULT: Good morning. Brian
2	Caldwell.
3	MEMBER CALDWELL: Hello, everybody.
4	MS. ARSENAULT: Hey, Brian. I knew
5	you were there. Jerry D'Amore.
6	MEMBER D'AMORE: Yes, and hello.
7	MS. ARSENAULT: Hello again, Jerry.
8	Carolyn Dimitri.
9	MEMBER DIMITRI: Good afternoon,
10	everyone.
11	MS. ARSENAULT: Hey, Carolyn. Liz
12	Graznak, sorry.
13	MEMBER GRAZNAK: That's all right.
14	Yes, I'm here. Good morning.
15	MS. ARSENAULT: Good morning.
16	Afternoon. Rick Greenwood.
17	MEMBER GREENWOOD: Yes, I'm here.
18	Good morning.
19	MS. ARSENAULT: Good morning. Kim
20	Huseman.
21	MEMBER HUSEMAN: Good morning.
22	MS. ARSENAULT: Hi, Kim. Allison

1	Johnson.
2	MEMBER JOHNSON: Good rainy morning
3	from California.
4	MS. ARSENAULT: Always good to hear,
5	Allison, sorry. Dilip Nandwani.
6	MEMBER NANDWANI: Good morning.
7	MS. ARSENAULT: Good morning,
8	afternoon, good day. Logan Petrey.
9	MEMBER PETREY: Hi, good afternoon,
10	everybody.
11	MS. ARSENAULT: Hi, Logan. Wood
12	Turner.
13	MEMBER TURNER: Here, good morning.
14	MS. ARSENAULT: Good morning. And
15	Javier Zamora?
16	MEMBER ZAMORA: Here. Buenos dias a
17	todos.
18	MS. ARSENAULT: Hello, Javier.
19	Welcome. All right. Nate, I am going to turn it
20	over to you.
21	CHAIR POWELL-PALM: All right.
22	Welcome to day 2, everybody. Just a reminder that

1	there is a policy in the policy and procedures
2	manual about public comments. Bear with me. So
3	all speakers who will be recognized, signed up
4	during the registration period. Persons must give
5	their names and affiliations for the record at the
6	beginning of their public comments. Proxy
7	speakers are not permitted. Individuals
8	providing public comment shall refrain from making
9	any personal attacks or remarks that might impugn
10	the character of any individual. And I just wanted
11	to give a bit of a shout out that I thought we did
12	a pretty good job with this on day 1, so thank you,
13	everybody. Members of the public are asked to
14	define clearly and succinctly the issue they wish
15	to present before the Board. This will give the
16	NOSB members a comprehensive understanding of the
17	speaker's concerns. I'll call on speakers in the
18	order of the schedule and we'll announce the next
19	person or two so they can prepare. Please remember
20	to state your name and your affiliation, and then
21	we'll start the timer. Board members will
22	indicate to me if they have any questions and I'll

1	call on them. Only NOSB members are allowed to
2	ask questions. So to get us kicked off, our first
3	speaker is going to be at Lynn Coody, followed by
4	George Szczepanski and then DeEtta Bilek. So
5	Lynn, the floor is yours.
6	MS. COODY: Okay. Nate, do you want
7	to test the speakers so everybody can hear it?
8	CHAIR POWELL-PALM: Oh, yes. Let's
9	hear that beautiful chime to know when we're done.
10	Please, go ahead.
11	MS. ARSENAULT: One moment, Lynn.
12	Sorry.
13	CHAIR POWELL-PALM: Thank you, Lynn,
14	for your patience.
15	MS. ARSENAULT: Let me count down just
16	a few seconds here. Can folks hear that?
17	MS. COODY: Yes.
18	MS. ARSENAULT: All right, Nate.
19	Okay. All yours, Nate.
20	CHAIR POWELL-PALM: All right. Thank
21	you, Lynn. Please go ahead.
22	MS. COODY: Okay. Thank you. Good

1	morning, everyone. My name is Lynn Coody and I'm
2	presenting comments for the Organic Produce
3	Wholesalers Coalition, seven businesses that
4	distribute fresh organic produce across the United
5	States and internationally. In our comments with
6	the NOSB, we express our own ideas and provide a
7	conduit for the voices of the many certified
8	growers who supply our businesses. I'll address
9	the risk mitigation table, and highly soluble
10	nitrogen fertilizers. OPWC views impartiality
11	provision as the basis for ensuring fairness and
12	due process for all participants in any oversight
13	system. We found the NOP's table focused
14	primarily on conflict of interest issues. But
15	since impartiality is centrally important to
16	implementation of oversight systems, we assert
17	that analysis must address, not just conflict of
18	interest, but all elements of impartiality
19	contained in the three main references for the NOP
20	accreditation program. Topics such as risk of
21	bias in each of the accreditation process.
22	Considering pressures arising when an

accreditation body also functions as a standard setting body, and need for thorough analysis of risk and residual risk. Responding to the sub committees questions about elements that may be missing or need clarification, we focus analyzing documentation of the impartiality provisions of of the main references one underpinning and NOP's accreditation system, ISO 17011. Our varying comments detail significant missing elements and topics needing clarification.

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HSN, after careful analysis of the proposal to regulate these fertilizers using a standard based on the C to N ratio, we concluded that the concept is too imprecise for practical application enforcement. as an tool. Additionally, we found the concept burdensome in its requirement for calculating contributions of nitrogen from both materials and practices against an imprecise estimate of a crop's nitrogen needs. Here's an example of the impacts on organic The starting point for concern produce growers.

1	is the need for crop-specific guidelines for
2	nitrogen requirements. This is a heavy lift for
3	the produce sector in which small and mid-size
4	farms are renowned for the wide variety of crops
5	grown, each of which would require development of
6	a region-specific guidance about its nitrogen
7	needs. Yet, using information from the proposal,
8	we see multiple technical difficulties in
9	determining the basis for organic systems. First,
10	the base rate of nitrogen need is expressed as a
11	range not there's a definite target. Second, the
12	nitrogen need varies with management practices
13	such as tillage or inter-cropping. Third, prior
14	crops increase or decrease the nitrogen need of
15	the current crop. And fourth, cover crop greatly
16	impact nitrogen needs yet vary in the amount of
17	nitrogen they contribute, making their impact very
18	difficult to quantify without analytical soil
19	testing. Thank you for the opportunity to comment
20	on these topics.
21	CHAIR POWELL-PALM: Thank you so much

for your comments. Brian has a question.

1 MEMBER CALDWELL: Thanks, Lynn for 2 your very comprehensive written comments. 3 was a lot in there and I really appreciate that. Would you just, kind of, spell out in simplest 4 terms possible, just some of the key aspects of 5 6 the risk mitigation, conflict of interest stance 7 that you folks are taking. I hear a lot of big words in there and the ISO reference and all that 8 stuff. And I'm trying to boil it down just for 9 10 my small brain here. So appreciate that. 11 12 MS. COODY: Well, Brian, this topic here is not to confound anyone, even a genius. 1.3 It's oversight of accreditation is a multi-layered 14 topic and it takes a while to get your head around 15 it, so don't feel alone. We have been concerned 16 for a long time about the aspect of risk mitigation. 17 18 And the new ISO, the ISO has fairly recently been updated to also include more of an emphasis on this. 19 One of the new elements is this idea of having 20

a risk mitigation table and also vetting it with

their stakeholders.

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So some of that, there are

-- we've identified multiple risks that were not 1 included in the risk mitigation table, as I said 2 3 in my -- both my written and oral comments. there are some significant risks. 4 One of the concerns -- we also detail this even more if you 5 6 could believe this in our comments on regulatory priorities. One of the risks that we're concerned 7 about, is the risk of inadequate oversight of the 8 NOP accreditation system due to conflict between 9 10 the peer review provisions in OEFFA and the 11 regulations. This is a long-standing issue and I feel -- and we are -- OPWC has discussed that 12 we feel that we need to get this fixed over -- it 13 will require a change to OEFFA but we feel like 14 15 it's very important. Another issue is that there is no 16 17 continuous oversight. And by that I mean, the risk 18 that the oversight of the NOP Program has -- is 19 based on this peer reviewed process that is Additionally, 20 inadequately matched with OEFFA. it does not require -- it doesn't have a mechanism 2.1 22 for enforcing timely over top, timely completion

1	of non-compliances. So there are a number of
2	really serious risks, things that we view as
3	serious risks that were not included in this table.
4	And what I would recommend is a kind of another
5	look at this table so that it does take into effect
6	into account all of the three major underpinning
7	of the NOP's accreditation system. That would be
8	NOP's own regulation, it's the ISO 17011 and any
9	other provisions from the general management of
L 0	agencies from the USDA. I'm not very familiar with
L1	that part of it, but I'm sure Jenny and others would
L2	be. So like I say, it's complicated and I
L3	appreciate you reading it. I do. I very much
L 4	appreciate that.
L5	CHAIR POWELL-PALM: Thank you for that
L 6	question, Brian. Amy has another question for
L7	you, Lynn.
L8	MEMBER BRUCH: Yes. Lynn, thank you
L 9	so much for your time here today and all the time
20	you and your organization put forth such as the
21	written comments. They were wonderful. I really
22	also appreciated the handling standards that you

1	reiterated from last meeting to this meeting,
2	that's definitely something that put in the
3	forefront, I appreciate you mentioning that again.
4	My question draw more broad-based, it's in terms
5	of innovation. So when I went through your
6	comments, and you can correct me if I'm wrong, I'm
7	kind of paraphrasing here. In the section on
8	biodegradable bio-based mulch, you mentioned that
9	the Board's most recent recommendation for an
10	annotation change encourages development in that
11	industry, which I think is a great it fosters
12	innovation. And then as we compare that comment
13	to the comment made about highly soluble nitrogen,
14	the comment seems to be a little bit different in
15	terms of that fostering the innovation approach.
16	You say, well, now or, I mean, it wasn't you,
17	somebody in the organization wrote that, you know,
18	it provides basically defines the limits of
19	acceptability for that next generation of
20	fertilizers. And those are, you know, could be
21	actually, the tools that help some of the growers
22	that you were saying, you know, need some

additional assistance maybe on their fertility program. So I just kind of wanted to understand the difference frame of reference between those two products and invasion.

> Well, that was a very MS. COODY: perceptive reading of our comments, Amy, and I congratulate you on that care. I would like to compare and contrast the amount of times that the biodegradable mulch -- plastic mulch has gone through the subcommittee and the NOSB and public When we are making a -- basically a comment. really big step forward, I feel like there needs to be much more consideration -- an iterative consideration of these concepts. So with the highly soluble nitrogen concept just coming out first as a proposal. I didn't feel like that was -- it was ready to be accepted just with the way that it was framed, the way that it was based, et So although I certainly agree that we need cetera. to take a careful look at especially kind of new paradigm materials that are likely to come out in the future, and to review them against

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1	evaluation criteria, I did not feel that the
2	that this particular proposal was ready to go
3	forward. And I tried to provide as much concrete
4	information about that, including our proposed
5	revision of the actual motion, that would be the
6	basis for its implementation. So at each step
7	where I was expressing concerns, I believe I was
8	also trying to provide a way forward for another
9	way of considering this very important issue in
10	organics.
11	MEMBER BRUCH: Thank you, Lynn. I
12	appreciate that.
13	MS. COODY: Thanks, Amy.
14	CHAIR POWELL-PALM: Any other
15	questions from the Board? I have just a quick more
16	high-level question on HSN for you, Lynn.
17	MS. COODY: Okay.
18	CHAIR POWELL-PALM: When thinking
19	about I think there's a fundamental
20	acknowledgment that these highly soluble nitrogens
21	are powerful, powerful for growing, but also
22	powerfully impactful for the environment, which

1	is often why they've been at the forefront of many
2	of our discussions. Do you think that when we're
3	looking at growers who want to use them, that it
4	isn't reasonable to expect them to be taking soil
5	samples quite often; to be figuring out what do
6	their soils actually need, what can they hold, what
7	is the impact of using these materials? As of now,
8	the material list would be fairly short because
9	it is more aimed at the future but like you said,
10	there are a lot of tools that growers have, cover
11	crops, animal manures, other tools would not fallen
12	under this proposed increased oversight. So, kind
13	of, striking that balance of making it not too
14	burdensome on certifiers since they're going to
15	be the ones primarily responsible for looking at
16	these materials, but also making sure that we're
17	keeping up with both our own expectations, the
18	spirit of OEFFA, and the consumer expectations that
19	our fertilizers are not impacting the environment
20	in a negative way.

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MS. COODY: So I think it's very

important to look carefully at any kind of a new
way of treating organic soil. I do agree that of
course, many growers took many soil samples. But
the problem with the way that the actual motion
is framed for me is that it is dealing with nitroger
need and it's the basis of it is not the analytical
soil test that you're talking about, like that's
not how you're talking about creating the basis
for comparison for certifiers to verify what the
growers are doing. What the proposal actually
says is it's trying to get a basic, kind of a
regional basis for each individual crop. And ther
comparing your crop against that. It's not so much
what's going on on the ground that I see as
problematic, it's the it's regional basis for
comparison, it's the baseline that I think will
be difficult in for certifiers and growers to
use to as an enforcement tool or as a tool for
growers to figure out how much nitrogen they car
apply, especially how much of these highly soluble
nitrogens they can apply. So I'm just concerned
about it being rigorous enough to actually pan out

1	as an enforcement tool. The way I think it would
2	pan out in practice is that only the most egregious
3	cases could be caught with this particular way of
4	framing the motion or the implementation of it.
5	In fact, most things would be most of the
6	non-compliances would not hold up. And that's
7	what I'm concerned about. If we're going to have
8	a standard, I want it to be clear to both growers
9	and certifiers, and the accreditation system. And
10	also for compliance. So these are the holes that
11	I was trying to point out and provide some
12	suggestions for plugging.
13	CHAIR POWELL-PALM: Which we very much
14	appreciate. Amy has one more question for you and
15	then we'll move on.
16	MS. COODY: Okay, Amy.
17	MEMBER BRUCH: All right. Just as a
18	follow-up to that.
19	MS. COODY: No problem.
20	MEMBER BRUCH: I was just wondering
21	your perspective on sodium nitrate that has been
22	around with a very similar practice standard. So

is that -- do you feel like that is clear in its understanding and regulation from a certified inspector point of view?

> MS. COODY: You know I used to feel it was clear, until this proposal came out. Now, comparing them, you're correct in saying they're similar, but they are not the same. The sodium nitrate wording talks about total nitrogen requirement, whereas this proposal talks about crop needs. And then uses those as the basis for the 20 percent calculation. So I now am unclear in my own thinking about whether we're talking about the amount of nitrogen that is -- let's see. How can I explain this? Whether we're talking about the nitrogen that is actually applied and 20 percent of that can be a highly soluble nitrogen product or sodium nitrate, or we're talking about a comparison to this theoretical basis for nitrogen So from now on, I am not clear about the need. sodium nitrate wording anymore because I feel like we're mixing metaphors here for how we're going to apply them. And there again it, since you read

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1	my comment carefully, I could tell I had a section
2	in there about, I'm concerned about stacking now
3	of sodium nitrate and using the 20 percent
4	different requirement for sodium nitrate. And
5	then also allowing it as a highly soluble nitrogen
6	fertilizer. So no, I'm no longer clear about it.
7	Sorry.
8	MEMBER BRUCH: Okay. Thank you. And
9	I appreciate your time.
10	CHAIR POWELL-PALM: Thank you, Lynn,
11	very much.
12	MS. COODY: Thank you.
13	CHAIR POWELL-PALM: Next up, we're
14	going to have George Szczepanski, followed by
15	DeEtta Bilek, and then Thomas Sisson.
16	MR. SZCZEPANSKI: Thank you to the NOP,
17	NOSB, and stakeholders for giving me the
18	opportunity to comment today. My name is George
19	Szczepanski, and I'm speaking on behalf of the
20	International Fresh Produce Association, which
21	represents over 2,500 companies from every segment
22	of the global produce supply chain, including over

1	500 companies directly involved in the production
2	and sale of organic fruits and vegetables. IFPA
3	recognizes the role that the sunset process plays
4	in maintaining inputs and standards that align with
5	the organic program, building a food system that
6	enhances the ecological balance and natural
7	systems. It should be recognized that the entire
8	organic crops industry exists in the market place
9	and is disadvantaged compared to conventional
10	grown product as the result of having fewer tools
11	in the toolbox with which to mitigate pest and
12	disease issues that may occur. This often leads
13	to destruction of unsellable crops, sometimes
14	entire fields that had been destroyed by pests,
15	ultimately wasting finite resources and
16	necessitating increased consumer prices to
17	maintain financial viability. Because growing
18	seasons can be highly variable and production
19	challenges unpredictable, the removal of items
20	from the national list can cause further
21	constraints to organic farmers and hinder
22	mitigation efforts.

1	For these reasons, IFPA encourages
2	judicial, objective, science-based
3	decision-making when considering sunsetting
4	allowed materials. With regard to highly soluble
5	nitrogen fertilizers, IFPA urges NOSB, not to
6	further just restrict their use as limiting it
7	would put organic produce growers at a further
8	disadvantage, and limit their ability to be
9	successful in production. We believe the use of
10	these products can be accomplished while
11	maintaining organic production. We also support
12	the continued use of a number of materials
13	currently under sunsetting consideration based on
14	the utility for production and lack of suitable
15	alternatives. We've listed those with further
16	detail and IFPA's written comments submitted to
17	the docket.
18	With regards to NOSB technical support
19	initiative from February 13, 2022, IFPA believes
20	that technical support to the NOSB should be
21	limited to careers scientists of all agencies
22	within the USDA, EPA, and FDA, who could receive

1	and vet input from scientists of public land grant
2	universities. NOSB is granted the authority to
3	convene technical advisory panels to consider
4	specific issues as a part of OEFFA, but the natural
5	limitations of a 15-person group require that these
6	outside sources should be utilized to ensure
7	objective science-based rationale that guides this
8	decision making process. We urge the NOSB to
9	approach consideration of recommendations to the
10	NOP with specific attention to need for adequate
11	tools for fresh produce growers, for objective
12	scientific review with an understanding of the
13	diversity for the many crops growing regions and
14	production methods in the organic universe. IFPA
15	has submitted more detailed comments to the docket.
16	We're happy to provide additional information at
17	any time. We appreciate your consideration of
18	these comments in support of the fresh produce
19	industry.
20	CHAIR POWELL-PALM: Thank you so much
21	for those comments. Any questions for George from
22	the Board? All right. Thank you. Again,

1 George, we appreciate your time today. 2 MR. SZCZEPANSKI: Thank you. 3 CHAIR POWELL-PALM: Next up, we have DeEtta Bilek, followed by Thomas Sisson, and then 4 Josue Castellanos. 5 6 7 Good morning. I'm DeEtta MS. BILEK: Bilek. I'm the staff person for Organic Farmers 8 9 Agency for Relationship Marketing, so part of my comments are from the organization, another part 10 11 of them are from as a certified organic farmer. 12 We are in Central Minnesota. Our farm has been certified organic nearly 25 years. 13 I'm also a member of the Organic Farmers Association, OFA 14 15 Policy Committee and some of my comments are on a personal basis there as well, because I do not 16 always agree with the policy with the rest who are 17 18 with me. The mission of OFARM is to coordinate 19 efforts of producer marketing groups to benefit 20 and sustain organic producers with a emphasis on opportunities to educate and engage 2.1 22 producers in the benefits of co-operative

OFARM continues to be proactive on issues which either directly or indirectly impact number of producers. We are asking the National Organic Standards Board to continue working to keep the Organic Program strong and to advocate for the needs of organic operations. While we want to commend the NOP for finally bringing up origin of livestock rules to fruition and the diligence to work through many aspects of strengthening organic enforcement rule, it still points to the problem of time involved in moving such important rule-making forward in a more timely manner. Our primary concern for the organic producers grain that OFARM represents implementation of the SOE rule is paramount. We do want to commend NOP on the progress that has been made in dealing with many surveillance and

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traceability. Dealing with fraud has been a top

enforcement aspects of the fraud issue.

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priority of OFARM and our OFA numbers.

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1	the potentials to identify fraudulent transactions
2	is a necessary part of strengthening enforcement.
3	As the Board and the NOP consider what new systems
4	will be necessary to increase the traceability of
5	organic supply chain, there must be flexibility
6	for those producers who use paper systems due to
7	difficulty accessing the Internet. Traceability
8	requirements must also consider different
9	marketing structures. On a personal basis, I
10	personally support transaction certificates. I
11	think in the past helped, especially for spraying
12	farmer's crop farmers helped to avoid fraud. I
13	personally support including acres per crop in or
14	the organic certificate as well as making that
15	information available in the organic integrity
16	database. Regarding the proposed NOSE
17	recommendation on highly soluble nitrogen or
18	fertilizers. I as an organic certified farmer,
19	I'm personally concerned about the ability of
20	certifiers okay.
21	CHAIR POWELL-PALM: I'll ask a quick
22	question to finish that sentence

1	MS. BILEK: Okay. Okay. So as an
2	organic farmer, I'm personally concerned about the
3	ability for certifiers, inspectors, and farmers
4	to monitor the 20 percent of crop needs. And I
5	wanted to thank the members of NOSB for their
6	dedication and appreciate the opportunity to
7	comment. Thank you, Nate for that.
8	CHAIR POWELL-PALM: Thank you so much
9	for your comments. We really appreciate your time
10	today. Javier has a question for you.
11	MEMBER ZAMORA: All right. Thank you.
12	Hi, DeEtta. I love your name. I think this is
13	the second time in America that I heard that name.
14	So that's very unique.
15	MS. BILEK: Thanks.
16	MEMBER ZAMORA: And I appreciate your
17	comments and it feels like you think like a farmer
18	which makes me really happy and how you guys think
19	of the collaboration among smaller farmers. And
20	you said a lot and a lot of beautiful things, but
21	there is something that I felt like I needed to
22	ask you. You asked for the NOSB to keep

maintaining the strong -- really all the strong 1 stand on how organic it is. Can you tell me in 2 3 which -- just a little sample on how you feel that maybe the NOSB is not meeting your expectations 4 5 for you and the farmers that you have these 6 relationships, your constituents in your area? 7 MS. BILEK: I think it's more so that NOSB will make the recommendations and it takes 8 a long time to get things into the rule. An example 9 is the strengthening organic enforcement. 10 I think once that is in the rule, it will solve a lot of 11 12 our issues or concerns. 13 MEMBER ZAMORA: Thank You. Remember. I'm also -- I'm just learning and I want to know 14 15 as much as possible and see how people think in different parts of the country and how we can 16 17 definitely make this a beautiful thing that many 18 people started many years ago. Ι dearly 19 appreciate what they started because it's 20 beautiful thing and therefore, we have to do our best as a group to keep it as healthy and as 21

1	accessible to everyone else.
2	MS. BILEK: Thank you.
3	CHAIR POWELL-PALM: Thank you, Javier.
4	I will remind everyone and I really appreciate
5	the conversation. Please try to keep the
6	questions a little peppy so we don't run out of
7	time today. One question for you quick, DeEtta
8	from me is: In your work with OFARM, it seems like
9	there's a lot of the questions that we hear from
10	folks highlight economic concerns in the organic
11	producer landscape, be it dairy, grain
12	inconsistency and enforcement leading to market
13	surpluses. Could you speak a little bit more to
14	what you see as the future of organic marketing
15	and organic cooperation amongst farmers?
16	MS. BILEK: One of the things that the
17	OFARM board members talk about is more
18	collaborative marketing or marketing through a
19	farmer co-operative. So I don't really know how
20	to answer that, I'm sorry.
21	CHAIR POWELL-PALM: That's fair. No,

no, no, I just wanted to give you a chance. Again, 1 really appreciate your comments today. 2 I think 3 that there's a lot more to be heard. So appreciate the work of OFARM and all you guys do. All right. 4 We'll keep on going. So next up is going to be 5 Thomas Sisson, followed Josue Castellanos, and 6 7 then Stephen Walker. So Thomas. Hello. Can you hear me? 8 MR. SISSON: 9 CHAIR POWELL-PALM: Yes. 10 MR. SISSON: All right. Thank you. 11 My name is Thomas Sisson. And I'm the technical 12 director of Indevity to speak on behalf distilled tall oil petition. Organic pesticide 13 formulators have developed many excellent active 14 15 ingredients but they recognize a need for inert 16 additive to deliver the full benefits. Optimizing 17 organic pesticide formulations means not only 18 increasing the efficiency, but also giving 19 formulation options on the type of products being This includes the ease of use for the 20 developed. grower, as well as additional organic certified 21

1 pesticide options.

2	Next slide, please. Distilled tall
3	oil is a versatile inert material with many
4	functions. It is a bio based material derived from
5	pine trees. There is a general lack of organic
6	approved solvent which prevents the
7	commercialization of many water, in soluble,
8	natural active ingredients. Distilled tall oil
9	is a natural adhesive or has sticky properties.
10	We've all experienced pine tree sap we know the
11	stickiness. This property helps hold active
12	ingredients under the leaf surfaces, reduces
13	runoff, and prolongs the actives life-cycle on the
14	crops. Fungus sides and insecticides are
15	particularly benefited. The inherent tackiness
16	of distilled tall oil, before to choose it's an
17	anti-leaching agent holding the active ingredient
18	component at the surface of the soil. In granular
19	formulations distilled tall oil can act as a time
20	release agent by increasing the time granular
21	products disintegrate, releasing the active

ingredients over a longer period of time.

2 Next slide, please. Approving 3 distilled tall oil will benefit arowers significantly. These include enhancing active 4 efficiencies, more organic certified products, and 5 ultimately to higher yields and hopefully lower 6 7 overall cost. The commercial benefits of using distilled tall oil as an organic inert will 8 9 ultimately reach consumers, helping to expand the 10 organic crop market.

> Next slide, please. U.S. growers are currently at а disadvantage in the global marketplace as distilled tall oil is allowed in organic products in the EU, Canada, and Japan. This also impacts formulators as they need to develop different products specific for the U.S. We believe the hurdles for acceptance is market. organic materials should be high. This includes inert ingredients like distilled tall oil. We also believe our petition demonstrates its safety and natural origins, and it clears this high

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1	hurdle. The overwhelmingly positive comments
2	support our beliefs. Distilled tall oil has been
3	used safely for generations by formulators and
4	growers in traditional crop protection products,
5	allowing the use of this bio-based, versatile,
6	environmentally safe, inert material, has multiple
7	benefits to the organic community. Thank you and
8	I look forward to your comments.
9	CHAIR POWELL-PALM: Thank you so much
10	for your presentation and your time today. Any
11	questions from the Board? All right. I know
12	we'll be talking quite a bit about this next week.
13	And so we really appreciate the information you
14	provided. All right. So next up, I don't think
15	we're seeing Josue. If you're there, please make
16	yourself known. Otherwise, we'll move on to
17	Stephen Walker, followed by Caleb Goossen, and
18	Elijah Dean. So Steven, if you are there.
19	MR. WALKER: Hello there. Hi.
20	CHAIR POWELL-PALM: All right. Hello
21	

1	MR. WALKER: Good morning, afternoon,
2	depending on where we're at. I'm Steve Walker from
3	MOSA, an organic certification agency based in
4	Wisconsin. I want to stress some points for our
5	written comments on supply chain traceability,
6	adding acreage to certificates, and standardizing
7	bill of lading info. MOSA certifies over 2,000
8	diverse organic operations throughout the U.S.,
9	including many quintessential, idyllic organic
LO	farms. We recognize preventing fraud and strong
L1	organic standards help these operations to survive
L2	and we also recognize the three requirements and
L3	keeping certification accessible to keeping
L 4	requirements can unevenly burden organic
L5	operations or organic system plan update season.
L 6	We're dealing with a number of smaller organic
L7	operations that are now choosing to drop their
L 8	organic certification because of the squeeze.
L 9	That's a loss chore label and I can share an example
20	if you-all ask about it. So we support finding
21	low-burden steps to improve traceability and fraud

1	deterrence, requiring acreage on certificates and
2	consistent data points on transaction documents
3	seem achievable. But we'd like clearly regarding
4	how crops and acreages would be listed. And we
5	have a few doubts about efficacy. We inferred
6	certificate that balance practicality for
7	certified operations with value in serving the
8	organic marketplace. The value of acreage
9	reporting may depend on certifiers agreeing on a
10	reporting taxonomy. Finding that agreement may
11	be a challenge because some case specific
12	flexibility in certificate language can enable
13	better organic community service in our
14	experience. Our organic acreage data could be
15	reportable and be mostly accurate. Variables like
16	crop rotation changes or multi-cropping may
17	introduce some data discrepancies. Also,
18	traceability can't fully rely on a single point
19	certificate and purchase information. It may be
20	affected by the number of buyers or sellers
21	interfacing with the inspected operation and

1	whether or not sales are from the same crop year,
2	as indicated on certificates. Our written comment
3	also noted that crop acreage might be confidential
4	business information. But in some, we can support
5	making crop-specific acreage publicly available,
6	if the organic community finds that the potential
7	benefits outweigh confidentiality concerns. And
8	if taxonomy and accuracy expectations are not
9	unduly burdensome. We have a lot of confidence
10	in the certification and inspection community's
11	ability to collaborate, to develop consistent
12	forms, including standardized transaction
13	documents. We also would appreciate technical
14	assistance on record keeping expectations with
15	examples and including use of appropriate
16	regulatory discretion when deciding which
17	communication tools to use to bring operations into
18	better compliance. That's all I have. Thanks for
19	your work. I appreciate the clock started ticking
20	kind of late for me.

CHAIR POWELL-PALM:

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Thank you for your

comments. Any questions from the Board for Stephen? Mindee has a question.

MEMBER JEFFERY: Yes, thank you for mentioning the loss of local producers. I am interested in hearing your reasons. I see that in our area as well.

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I have -- yes, thanks for MR. WALKER: asking. I kind of debated that one a little bit. I'll share one written response that we received this past week from a producer, I mean, it's an example of some that we're hearing. It's not throughout the system, but we're hearing this from This is in response to reminding some operations. them that, hey, we haven't received your organic system plan yet for your update yet on our April And they said that they've been in 1 deadline. serious consideration about our organic certification status, contemplating it's place in small farm, both from a production and our marketing perspective, as well as factoring in the

1	effort needed when growing under extreme
2	conditions. They had a drought last year as an
3	example. And so we've come to the conclusion that
4	although we've been grateful for the
5	certification, maintaining our certified organic
6	status is not something we find necessary, given
7	the paperwork and process involved, moving
8	forward. And they noted some of their
9	considerations, including that the farm is small,
10	producing for local seasonal distribution.
11	They're finding that the amount of work involved
12	in the paperwork and process requirements for a
13	multi-crop vegetable farm versus a commodity farm,
14	don't justify the small income the farm produces.
15	Second, the certification status is for marketing
16	purposes only, it doesn't affect how they grow.
17	We have always and will continue to farm with the
18	same organic and regenerative practices. And then
19	they mentioned drought or other extreme weather
20	conditions that's requiring more time effort
21	caused or medial methods, mental, physical stress

and the added burden of the current requirements 1 for certification on a small farm, like theirs, 2 3 it's one set of stresses that they felt that they could eliminate and still be able to focus their 4 energy on producing food. And then they affirm, 5 6 you know, we have to do the work that we do. 7 understand that we're required to administer and enforce the standards as written by the USDA and 8 9 it was their hope that working together at all levels that we can improve the process and ease 10 11 of implementation for all types and sizes of farms. 12 So it's the kind of thing we're hearing. 13 yes. 14 CHAIR POWELL-PALM: Amy has а 15 question. 16 Stephen, thank MEMBER BRUCH: Yes. 17 you for summarizing these important points of view 18 and just kind of highlighting the record keeping 19 requirement, keeping costs low, and then that 20 maintaining integrity, it's kind of the three legged stool there. You made a comment in your 2.1

written delivery of the public comment process about MOSA being an active participant in groups that the ACA puts together. And I thought that was -- that's great so that participation and you went on to say about collaboration potentially would be needed between ACA and IOIA to generate, you know, best practices for key data that we could capture potentially, with bills of lading. I just wondered in these working groups, I think the collaboration pieces important. Is there ever an opportunity for the farmer point of you to be integrated in some of these types of workshops? So you can -- maybe there's an idea to streamline and get everybody's point of view across? MR. WALKER: Yes. I think there is an opportunity typically the working groups do involve really just certify sometimes we'll reach out and include other stakeholders. I'm not aware of a case where we've actively reached out to say to get farmer representatives as a part of that working group, and I would assume there could be

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1	openness to that. On the other hand or maybe not
2	on the other hand, but as a part of that, I think
3	certifiers are pretty well aware of what a lot of
4	the farm issues are and a lot of certifiers are
5	actively farming as well. So it's a good point
6	and I think that the main point is to bring the
7	right stakeholders, and perspectives to the table
8	so that we don't implement something that we find
9	out later on. We should have thought about that.
10	MEMBER BRUCH: Yes, absolutely.
11	Thank you. Appreciate it.
12	MR. WALKER: Yes. Thanks.
13	CHAIR POWELL-PALM: We have another
14	question from Liz and then Kim. No question, Liz?
15	Okay. Kim, go ahead.
16	MEMBER HUSEMAN: Sorry. I couldn't
17	get my thing to unmute. Can you hear me now?
18	CHAIR POWELL-PALM: Oh, we can, yes.
19	Go ahead.
20	MEMBER HUSEMAN: Okay. Sorry.
21	CHAIR POWELL-PALM: No worries.

HUSEMAN: Okay. 1 MEMBER Stephen, 2 thank you very much. Being a small farmer myself, 3 could you, or do you know in regards to the smaller scale producers, are they primarily retail selling 4 and no wholesale production? And because they're 5 retail selling, there may be already demanding a 6 pretty high price for their product that they're 7 selling and so therefore, they don't feel that the 8 organic certificate, organic label would allow 9 them a higher price? And therefore, they don't 10 11 feel that it's important? I'm just trying to 12 understand more about why the smaller producer feels like it's not necessary for them. 13 Yes. I think that it's 14 MR. WALKER: 15 a fair characterization but I'd be cautious about stereotyping and saying, all small producers feel 16 17 this way. And I don't know how well I can represent 18 that per se, but I think a lot of times it is a 19 choice of what their markets need. And if their 20 distribution chain is direct to consumer then maybe they're deciding that they can communicate the 2.1

attributes of their operation without having the organic certification. However, is it what we want for folks to be able to say, Looks it's organic, and organic means, look at this whole set of standards over here and again, I've appreciated some of our Nate's questions in the last couple of days about what can we to do to make organic become more than, you know, five percent of the market, to get it up to, you know mostly it's organic vision anyway of a thriving organic world. And I think there's a lot to be said for education, better promotion of what organic's stacked benefits are. Talking about what we do well, at these meetings.

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So often we're debating the things that, you know, we haven't figured out yet and I think it can be characterized, maybe it's, well, those organic people aren't agreeing on anything.

But we are, you know, we agree on the basic principles and I think that if we can unify around

and health ecology in fairness care, soil health
and the things that we agree on. And really put
that message forward, that it would be a way of
you know, moving the whole program, the whole
community forward. And also, if it's a cost issue,
cost in time, cost in dollars, and now as so many
of us are working at home and we're able to seek
staff support from all around the country. We're
finding that although we're in the Midwest were
kind of competing with some of those capacity
changing resources on a national level. And that
translates to what does our clientele look like
versus what another certifier's clientele looks
like? How many dollars are we bringing in? What
can we afford to pay versus certifiers in other
locations? So some sort of equity and cost support
for the necessary business of certification would
be helpful and also just seizing that organic is
still a gold standard. And as we see other labels
trying to come in and patch in places where we're
not as strong as we can be, some of those can be

seized as well. Organic is regenerative, organic 1 is climate-smart agriculture. 2 Those sorts of 3 things. So --CHAIR POWELL-PALM: I so appreciate 4 everything you're saying, right now, Stephen. 5 In the name of time, I'm going to have --6 7 MR. WALKER: Yes. CHAIR POWELL-PALM: Kim, asked her 8 auestion. But -- I am not cutting you off. 9 is exactly what I hope the group of our community 10 11 starts engaging as a talking point. Kim, please 12 go ahead. MEMBER HUSEMAN: Hi Stephen, I really 13 appreciate the way that you've helped bring a light 14 15 to a lot of the -- a lot of these topics that we struggle in how to manage through. 16 My question 17 for you is: In a lot of the comments that I'm hearing 18 and reading the three words as we try for better 19 SOE practices is traceability, transparency, and 20 confidentiality. From your perspective, what is the line in the sand between traceability and 2.1

1	transparency and encroaching on confidentiality?
2	MR. WALKER: I think I don't know
3	if there's a concrete line. I think it's another
4	question of balance. And I know when you're
5	writing regulations, you want to have it, you know,
6	concrete so, you know, people can say am I meeting
7	the standard or am I not. But it some people
8	like words in the standards like significant which
9	is open to interpretation. I tend to like those
10	kinds of words and then be able to apply those to
11	the aspects of the operation. And what this
12	operation need to come into compliance versus
13	another operation. So yes, it's tricky to draw
14	we're in the business of drawing lines.
15	Sometimes a line can be drawn and then examples
16	can be given that help to show better where that
17	line is, you know. Here's examples of things that
18	are clearly not compliant. Here's examples of
19	things that clearly are. And sometimes we don't
20	get examples of things that are on a line that might
21	be a little bit fuzzy, but we're all really good

1	at critically thinking.
2	MEMBER HUSEMAN: Thank you, Stephen.
3	CHAIR POWELL-PALM: Thank you so much,
4	Stephen. I apologize. I really have to keep on
5	moving, but thank you so much for your insights
6	today.
7	MR. WALKER: Thank you.
8	CHAIR POWELL-PALM: I appreciate it.
9	MR. WALKER: Bye, bye.
10	CHAIR POWELL-PALM: Next up, we have
11	Caleb Goossen, followed by Elijah Dean, and then
12	Jeff Dean. Caleb, the floor is yours.
13	MR. GOOSSEN: Hello. My name is Caleb
14	Goossen. I'm the crop specialist for MOFGA, the
15	Maine Organic Farmers and Gardeners Association,
16	one of the country's oldest organic associations.
17	I believe the most important topic for me to
18	comment on right now is regarding the restriction
19	of nitrogen fertilizers with a carbon to nitrogen
20	ratio of three to one or less. I think that
21	I thank the crops of the committee for their work

on this topic and fully support the proposal. 1 Highly available sources of nitrogen with carbon 2 3 to nitrogen ratios of three to one or less should be greatly limited to ensure that organic fertility 4 true to the foundational 5 management remains principle of feeding and building soil. 6 7 to nitrogen ratios are the best method that I am aware of, to measure a natural fertility materials 8 9 remineralization, and properties as a food source life and subsequently their 10 to soil plant 11 availability. The current proposal would do an 12 excellent job of providing much needed guardrails allowing organic 13 while still growers great flexibility in different growing 14 conditions. 15 With very low added burden for most farmers and certifiers. 16 18 The direct relationship between carbon

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to nitrogen ratio and release rate of plant available nitrogen has been known for at least 80 There's a study on the topic from the New years.

1	Jersey Ag Experiment Station that was published
2	in Soil Science in 1942. The proposed three to
3	one carbon to nitrogen ratio is a generous dividing
4	line for distinguishing rapidly available nitrogen
5	fertility amendments that allows great producer
6	flexibility in meeting acute crop needs with common
7	traditionally used organic fertility sources while
8	still setting a minimum floor to ensure that at
9	least 80 percent of the nitrogen is also supplying
10	at least some carbon to feed the soil. Bruce
11	Hoskins who is at the University of Maine suggests
12	that a ten to one carbon to nitrogen ratio is the
13	threshold for rapid nitrogen availability from
14	fertility amendments. And that's based off of
15	many other studies. Bruce's own studies, Heather
16	Darby's studies at UVM, it's pretty well
17	established. So anything that's below that and
18	still about three to one, you're still allowing
19	farmers to get that rapid nitrogen release. And
20	then there's that additional 20 percent of nitrogen
21	that could be coming from even more readily

available sources of fertility. So with that I 1 2 yield my time and happy to answer any questions 3 about this or other topics. CHAIR POWELL-PALM: Thank you so much 4 for your comments today. Any questions from the 5 6 Board? Amy has a question. 7 Caleb, thank you for MEMBER BRUCH: Thanks for your perspective. 8 your time today. 9 You touched on this briefly in your comments just a little bit ago but I just wanted for you to quickly 10 11 compare and contrast the CDN ratio with the -- just 12 looking at nitrogen solubility. I mean, one trick 13 MR. GOOSSEN: Sure. is that solubility is sort of a tricky concept. 14 15 If we're talking about actual compounds and how quickly they dissolve versus whether the substance 16 17 is miscible and is able to be put into a solution, 18 of which many of some of our newer fertilizers out 19 there are easily put into a -- easily, at least 20 in solution, maybe not dissolved in solution, and can be applied liquid. And, you know, if we think 2.1

about some of our common fertility sources from 1 2 forever, manure, there's usually ammonium nitrate 3 that comes out readily as a soluble nitrogen That's why I actually prefer to use plant 4 source. availability or highly available nitrogen as a term 5 or less available. Bruce Hoskins who I mentioned 6 7 just uses rapid release, gradual release, very slow release, or tie up of nitrogen based on that carbon 8 to nitrogen ratio. And it really just kind of gets 9 back to the fact that microbes in the soil possess 10 11 a very specific carbon to nitrogen ratio within 12 their own bodies essentially. And when you supply them with excess carbon, they tend to lock up 13 supply them 14 nitrogen, when you with nitrogen, they will blow through whatever carbon 15 is available to them in really loose terms. 16 17 Thank you, Caleb. MEMBER BRUCH: 18 CHAIR POWELL-PALM: Thank you for your 19 comments, Caleb. Appreciate your time today. Next up, we've have Elijah Dean, 20 All right. followed by Jeff Dean, and then Joel Kurtz. 2.1

1	MR. ELIJAH DEAN: Okay. Can you hear
2	me?
3	CHAIR POWELL-PALM: Yes, we can.
4	MR. ELIJAH DEAN: Excellent. All
5	right. Hi, everyone. This is Elijah Dean. I am
6	a full-time farmer in North Central Ohio, and I
7	have two topics I'd like to talk to you about today.
8	Just like the previous commenter, my first one
9	is about the highly soluble nitrogen fertilizers.
10	We've I fully support the extension of the
11	existing rules regarding Chilean nitrate and using
12	that as only 20 percent of the crops nitrogen needs.
13	And it seems like a logical extension to expand
14	that to all other similar nitrogen sources. And
15	I really appreciate the effort to establish general
16	guidelines with the three to one ratio. I really
17	like how that allows for flexibility in farmers'
18	operations. And it also allows for flexibility
19	in the development of new products coming to the
20	market. I think it's a really smart way to provide
21	for the needs of multiple groups within the organic

space. And as a farmer, I know that having that flexibility can be very important on certain years, depending on how crops are -- have performed through the winter. For example, our wheat right now, it could use a bit of extra nitrogen and having the ability to use Chilean nitrate for just that little extra boost is extremely beneficial.

Secondly, I would like to talk about the timing and format of meetings. This is probably a topic that you all are tired of hearing from me about. I think this is the fourth year maybe that I've been mentioning it. But having these meetings in the spring and in the fall is extremely disadvantageous to the farmers of the country. And it has been beneficial to have all of these Zoom meetings over the past couple of years because it puts us more on an equal playing field. It's much easier to take a couple of hours than it is to take a couple of days this time of year but still going forward I think it would be very advantageous to have the meetings at a time when

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more of the country's farmers are able to attend. 1 2 And there are many different ways we could go about 3 Perhaps just shifting the meetings two weeks every time and gradually progressing through 4 the year. Or maybe eventually progress them to 5 6 a time such as the winter when the majority of the 7 country's farmers are available and able I think it would be advantageous for 8 participate. 9 the Board and advantageous for the organic movement 10 as a whole. Thank you. 11 CHAIR POWELL-PALM: Thank you for your 12 We really appreciate your work and the comments. OEFFA Grain Growers Chapter is always very helpful 13 farmers' voices 14 with bringing to this 15 conversation. Amy has a question. 16 Elijah, thank you for MEMBER BRUCH: 17 your time today from here to the operation. The 18 last mentioned, Ι believe comment you you 19 referenced him that it shouldn't be a burden, but 20 it's calculations if you wanted to use a highly stable nitrogen product and you mentioned that the 2.1

1	guidelines were clear in the proposal, and that
2	you potentially would be choosing to use one of
3	these types of products. Do you find the
4	calculations to be straightforward enough, that
5	you feel comfortable with what's being proposed?
6	MR. ELIJAH DEAN: Definitely, yes.
7	The discussion document lays out a couple of, for
8	me easy to follow examples of how this would be
9	implemented. Both for an individual source of
10	nitrogen under this requirement and also for
11	multiple. I think it's laid out very clearly, and
12	I would have no problem at all implementing that
13	in a way that follows the rules.
14	MEMBER BRUCH: Thank you. I
15	appreciate that.
16	CHAIR POWELL-PALM: Logan.
17	MEMBER PETREY: Thank you, Elijah.
18	I'm curious, you said this winter, you're going
19	to need a little bit of sodium nitrate to help you
20	out. Just curious to what kind of winter
21	conditions you may have had or spring conditions

that where you're requiring the use?

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It's still something MR. ELIJAH DEAN: that we are considering. We managed to get our wheat planted early and we had a mild winter that it survived and is looking really good. With that stand, we are probably going to be limited on nitrogen for the yield potential of that crop. I am not sure yet whether we're actually going to go ahead and use Chilean nitrate to provide that a little boost to it or not. But the option is there and I really appreciate having that flexibility.

MEMBER PETREY: Yes. And I'm speaking from a farm in the southeast where we use Chilean nitrate a lot of range but I was just curious that what may have faced that came -- that would have me put that out. Also, just to comment on the, you know, the meetings, we'll definitely talk about it. It has come up a lot. You know, the time of that also, you know, something that we're going to have to consider is the on boarding if you know,

new board members and then the exit of other board 1 members. But we definitely want to look in to what 2 3 we can do. So thank you. MR. ELIJAH DEAN: If I could add one 4 5 more thing about the wheat yields. In our area, 6 depending on when the wheat is planted and how the winter goes, it would be unwise for us to fertilize 7 for an absolute top crop every year. 8 Because if 9 the wheat doesn't do well, we would be really over fertilizing and adding a lot more nitrogen out 10 11 there in the fall with manures, than the wheat will actually take up. So if we fertilize for a middle 12 13 yield and then add the Chilean nitrate on top, we can make sure we're not over fertilizing. 14 15 MEMBER PETREY: And when you say over fertilizing you're meaning with the manures where 16 17 we could be polluting with organic fertilizers? 18 MR. ELIJAH DEAN: Correct, yes. Possibility. 19 20 CHAIR POWELL-PALM: Thank you, Elijah. I really appreciate your time today. Next up, 21

1 we have Dean, sorry, Jeff Dean.

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2 MR. JEFF DEAN: Can you hear me okay?

3 CHAIR POWELL-PALM: Yes, we can.

All right. JEFF DEAN: Ι Jefferson Dean of TimberLane Organic Farms and you just heard from my son. Also an O for organic, Ohio ecological Food and Farmers Association Grain Growers Chapter member. I want to thank everybody for serving on the board. I know it's a big responsibility to uphold the integrity of organic industry and we appreciate your efforts. I have a few things I want to talk about. First is hydroponic and container systems. These systems do not use soil and they don't comply with the letter of the rules nor the spirit of the rules. Soil and soil building is right in the description of organics, as well as other places such as crop rotations, both stating that the goal is for --This needs to stop or change the to build soil. We can't have, you know, noncompliance rules. being certified. far highly soluble As as

1	nitrogen fertilizers, this is an easy one for me
2	because there's already a precedent, and that's
3	Chilean nitrate. I support the, you know, the
4	addition of this motion. And I think it's pretty
5	simple. If a grower thinks it's too complicated
6	to figure it out, they don't need to use it. You
7	know, and if they're using it too much, they're
8	probably not following the organic spirit of
9	organic. So as far as timing of the NOSB meeting,
10	this is getting to be a sore subject with me. I've
11	been bringing this up this issue up for over
12	five years about the times of the meetings and
13	they need to be scheduled different so that more
14	farmers can participate. I'm beginning to think
15	that maybe the Board at least in the Board in
16	the past, is didn't want farmers to participate
17	and that's why we they've kept the meetings,
18	you know, in the spring and the fall when it's very
19	difficult for most farmers to participate. So I
20	want to thank you again for listening to my comments
21	and open to any questions.

1	CHAIR POWELL-PALM: Thank you so much,
2	Jeff, for your comments today. Any questions from
3	the board? Amy?
4	MEMBER BRUCH: Yes, Jeff, I don't have
5	a question for you this time, but I just want to
6	say thank you. I really appreciate your
7	participation taking time away from your
8	operation. This is really important to hear your
9	voice and the other farmers' voices. Thank you.
10	MR. JEFF DEAN: Thank you very much for
11	your participation.
12	CHAIR POWELL-PALM: Mindee.
13	MEMBER JEFFERY: Thank you. Also
14	really appreciate you. I was wondering if you see
15	this platform as a functional compromise to the
16	timing question?
17	MR. JEFF DEAN: I'm not sure I think
18	that meeting in person has more impact, but this
19	helps definitely. The problem with meeting in
20	person is that they're constantly big business
21	trying to get in and water down the rules, and it's

1	very difficult for farmers to compete with that.
2	And they can send an entourage of people to come
3	in and, you know, speak to you, and it's very
4	difficult for farmers to, you know, spend their
5	own money to travel across country to try to
6	compete. But I think in person it's more
7	impactful. I would like to ask you is the
8	in-person, you know, face-to-face conversation
9	more impactful than the Zoom?
10	MEMBER JEFFERY: Good question.
11	Honestly, this is we haven't my class hasn't
12	had an in-person meeting yet, so the actual
13	experience isn't there for me. And I'm really
14	interested in whatever the functional compromises
15	that gets us the most participation because I am
16	very interested in all the farmer, especially small
17	farmer prospective so thank you.
18	MR. JEFF DEAN: I'd also like to say
19	even, this time of year, it's difficult for us to
20	get away sometimes to do a Zoom. I know we've done
21	a couple of them in the past

1 PARTICIPANT: Give me two minutes and 2 then we go out. 3 MS. ARSENAULT: Sorry, I was -- Jeff, I just muted you by accident trying to mute someone 4 So can you unmute yourself to finish? else. 5 6 Sorry. 7 I'm sorry. I didn't MR. JEFF DEAN: realize that. I was like, even, you know, the 8 9 meetings at this time of year, the spring and the fall are difficult, you know, sometimes, you know, 10 11 we're lucky today, we're not, you know, out in the 12 field, but we've done the call-ins at the edge of the field. We stopped the tractor and get in the 13 It can be difficult I know 14 pickup and call in. 15 a lot of farmers don't participate because of that. 16 So there's -- I don't see any reason why you can't 17 have them, you know, in the winter and, you know, 18 having them in Phoenix would be great so we can 19 all come down and enjoy the week in warm weather, 20 but anyhow. Thank you very much. CHAIR POWELL-PALM: One thing I'd just 21

like to throw at this conversation is we do legally 1 need six months between the meetings. So it's just 2 3 tricky to find that, you know, if we're in the heat of the summer, then and the depth of the winter. 4 Then always going to be folks who can't make it, 5 but Rick has another question. 6 7 MEMBER GREENWOOD: Just --Rick, I think your 8 CHAIR POWELL-PALM: 9 muted. Jeff, I agree with 10 MEMBER GREENWOOD: 11 you because I think I'm the only board member now, 12 since I'm in my fifth year, that actually has been to the live meetings and I agree they are more 13 impactful. In particular, since I also am a 14 15 Hearing the feelings that people have, in particular, when we went through a lot of the 16 17 dairy issues, I mean, you really get a feel for 18 what's going on that's missing on the Zoom. The 19 other side of it is using the Zoom. Like for me, 20 it's two days that I gain because I don't have travel time and so it's a tough question, it really 2.1

1	is. And so I just harvested two weeks ago and I'm
2	in Southern California so it's really hard to
3	balance out a big country like this and find a time
4	that's appropriate for everyone. But, you know,
5	I guess I can say I feel your pain.
6	MR. JEFF DEAN: Well the suggestions
7	been made that we conduct the meeting up, you know,
8	or move forward two months, two weeks, every time.
9	And that would make, you know, comply with the
10	six months thing, but also change the meeting every
11	year, so that, you know, everybody has a chance.
12	MEMBER GREENWOOD: Yes. Got it.
13	Thanks a lot.
14	CHAIR POWELL-PALM: Dilip, has a
15	question.
16	MEMBER NANDWANI: Well, this is not a
17	question, it's just a suggestion or a comment.
18	Another option, you know, listening to this timing
19	of the meetings, we have a hybrid formula that's
20	available. And it could be in person as well as
21	on the Zoom as well those who cannot make in person,

1	that's I wanted to
2	CHAIR POWELL-PALM: Thank you for
3	that. Yes, there's going to be some piloting of
4	some new tech integration in the, hopefully
5	in-person fall meeting. So I hope that we'll be
6	able to glean some ideas from that. Really
7	appreciate your time today, Jeff, one question I
8	just wanted to throw your way is: As an organic
9	farmer, what is holding back your growth? What
10	would and what do you think it would take for
11	more of your neighbors to start going organic?
12	You're conventional neighbors. What is it that
13	we can what barriers are there and what can we
14	overcome to make it happened?
15	MR. JEFF DEAN: Educate
16	CHAIR POWELL-PALM: Education of the
17	consumer to drive demand so we have more markets?
18	MR. JEFF DEAN: No. Education of the
19	farmers. I don't think they understand much about
20	organic and sometimes there's still a bad
21	connotation out there of what organic actually is

1	and how it works. And they're coming around, we
2	picked up a fair amount of new growers in the last
3	few years. The transition seems to be a tough
4	hurdle for a conventional farmer to get over. When
5	they actually go through it, I don't think it is
6	as nearly as difficult as they think it is. But
7	that would be part of the education on how to get
8	through that. There's many ways to get through
9	transition without, you know, a financial burden.
LO	So I think education is the key.
L1	CHAIR POWELL-PALM: All right. Well,
L2	we really appreciate your time here today.
L3	MR. JEFF DEAN: But I think nutrition
L 4	and education is key to all our problems in the
L 5	world, social and economic. So
L 6	CHAIR POWELL-PALM: I can agree with
L7	that, yes.
L 8	MR. JEFF DEAN: Thank you.
L 9	CHAIR POWELL-PALM: Moving right
20	along, we'll next time have Joel Kurtz followed
2.1	by Raymond Yoder, Jr., and then Doyle Stoller.

1 Joel.

2 MR. KURTZ: Can you hear me?

3 CHAIR POWELL-PALM: Yes, we can.

4

5 MR. KURTZ: Hello. My name is Joel 6 I worked as an agronomist at Maysville 7 We are a local feed elevator located Elevator. in the Amish community in Holmes County, Ohio. 8 9 I'm also a contract inspector for OEFFA. want to thank all the board members for the service 10 11 you've been providing certainly. Thank you for 12 First comment, I support restricting the highest volume of nitrogen fertilizers. 13 this will encourage the farmers to manage far more 14 15 ecologically from an organic systems approach. 16 I believe farmers can be more profitable and 17 provide healthier food crops by managing soil 18 health instead of depending more on the purchase 19 type of inputs. And then also on the oversight, 20 the -- to deter fraud, you're gaining trackability infrastructure. I support a universal bill of 2.1

1	lading. I believe this would increase
2	transparency. And then on acreage reporting, I
3	believe acreage reporting would work best if
4	approached by size, small acreage could be reported
5	as mixed crops. I think on Tuesday we had we
6	heard about that conversation. And then just a
7	side note on data systems, building traceability
8	infrastructure. I believe the integrity and the
9	future success of the organic system is dependent
10	on a flexible, decentralized auditing system,
11	versus a single centralized system. Recent world
12	events have shown that being dependent or
13	centralized systems is not in the best interest
14	of people that need food to survive which is all
15	of us. By having flexible, diverse auditing
16	methods, it appears to not be as efficient, but
17	when one method fails, another method may be able
18	to continue providing the needed service.
19	Variability and farm size also can dictate what
20	method is most successful for farmers. I guess,
21	in short, paper still has value. Thanks again to

the Board and I'm open for questions. 1 CHAIR POWELL-PALM: 2 I just want to 3 throw out real quick that I am so excited we have someone from the Amish community commenting today. 4 I think this is something really, really special 5 to be able to hear from a wider swath of organic 6 7 farmers. thank you for your time. So questions from the Board right now? 8 I have a question for you. When we look at -- we've heard 9 from several mostly certifiers, that we want to 10 11 record keeping requirements create and 12 advancements in record keeping that are not overly burdensome on certain groups, such as the Plain 13 community who's going to usually more paper-based. 14 15 With this idea of a universal bill of lading does 16 that seem doable with the paper, primarily 17 paper-based systems that your community and your 18 business runs on? 19 MR. KURTZ: Yes, I believe so. If you 20 have -- if we've got a universal bill of lading that the farmer can actually fill out, and that 21

1	can follow along to, you know, the end-user or sale,
2	like for example, the elevator at that point, if
3	it's a non-Amish business that can input that into
4	the data system, I don't think that would be a
5	problem.
6	CHAIR POWELL-PALM: All right. I
7	really appreciate that. And then in looking at
8	the acreage reporting, do you feel that you and
9	your neighbors and other folks in your community
10	are comfortable having their acreages listed on
11	the certificate?
12	MR. KURTZ: Yes, I believe they are
13	comfortable reporting their acreage. The big
14	thing is just making, you know, moves in planning
15	in the springtime when they change which crops they
16	do. And most of them are smaller acreage with,
17	you know, 20 acres all the way down to, you know,
18	around three-quarter acre or whatever. But no,
19	I don't think they would have a problem reporting
20	the actual acreage for their crops.
21	CHAIR POWELL-PALM: Thank you very

much for that. Amy has a question. MEMBER BRUCH: Yes, Joel, thank you for 2 3 your time today and participation. And it sounds like you participated through listening on Tuesday 4 too, so the thanks for that. You just mentioned 5 6 in your answer to Nate that if we had some type 7 of a universal bill of lading that could maybe transfer through. And I see that you're a part 8 9 of, and you mentioned this, the Maysville Elevator. Is there a chance with low burden to associate 10 11 the bills of lading that farmers have with the 12 settlement sheets that maybe you supply growers just so that reconciliation and tieback could take 13 place with low burden? 14 15 KURTZ: Yes, I believe so. something like back 16 believe to work 011t. Obviously, as far as the elevator goes, we have 17 18 to keep, you know, records anyway, and we are 19 dealing with the farmer. And so the farmer's 20 success and our success hinges on us working together and making it work for both of us. 21

1

1	so I guess I feel in our situation, if we can provide
2	something that the farmer has a hard time providing
3	himself, if we can provide that for the farmer,
4	and provide that integration into the system, that
5	will be very beneficial to the farmers and they
6	will not have a problem to use it that way.
7	MEMBER BRUCH: Great. Thank you so
8	much.
9	CHAIR POWELL-PALM: Thank you, Joel.
10	Thank you so much for your participation and
11	comments. Next up, we have Raymond Yoder Jr.
12	followed by Doyle Stoller, and then Alan Lewis.
13	So Raymond
14	MR. YODER: Good afternoon. Can you
15	hear me?
16	CHAIR POWELL-PALM: Yes, we can just
17	go ahead.
18	
19	MR. YODER: Okay. So Raymond Yoder
20	Jr. representing Green Field Farms here. So Green
21	Field Farms we have about 330 members and we're

1	neighbors with Joel here in the Plain community
2	in Central Ohio. And our mission is to keep the
3	small families on the farm. Being that bridge from
4	the producer to the consumer. And I'm going to
5	thank all the NOSB Board members for your time
6	serving. Hopefully the rewards of positive change
7	can outweigh the personal sacrifice that it takes
8	to do that. First off, I'm going to support the
9	continued use of restricted micronutrients. I
10	feel those are just very essential for soil health
11	and highly nutritious crops. And at the same time,
12	I do want to mention something that we have really
13	worked with or struggled with and that is
14	magnesium. Most of the soils that we work with
15	in the Midwest region, it's inherently high in
16	magnesium, the soils are. And we've found that
17	it's just always low in the crop, if we do a tissue
18	analysis and the our preferred source for
19	magnesium correction is magnesium sulfate. And
20	in the letter of the rule, it says it's restricted
21	in the soil. And so for high in the soil, we're

low in the crop and we, you know, we talk about 1 this in our winter meetings with the farmers and 2 3 we always get that guestion. Well, it's -- we can't apply it because it's excessive in the soil. 4 So my recommendation would be to change the rule 5 there so that we could -- and so the thing of it 6 is the magnesium deficiency is often identified 7 by the farmers as a nitrogen deficiency because 8 it looks similar, yet it is identifiable. 9 we -- nitrogen covers it up. But if we use nitrogen 10 to do that, quality suffers, unless magnesium is 11 12 fully applied. The other thing on the highly soluble nitrogen. I do support the proposal there 13 to -- I -- the concept -- the commercialized concept 14 of applying, you know, so many parts per million 15 of NPK every day for record yields is just not soil 16 friendly, so thank you. 17 CHAIR POWELL-PALM: Thank you very 18 19 much for your comments today and your participation. Amy has a question for you. 20 MEMBER BRUCH: Yes. Thank you so much 2.1

1	for your participation today, Raymond. I thought
2	it was very interesting. What you're talking
3	about with soil balance being key and I tend to
4	agree with you that calcium-magnesium relationship
5	is really important and sometimes nitrogen might
6	seem like it's not there when it really is. So
7	getting that soil balance is important but I wanted
8	to ask you, in terms of it looked like maybe if
9	you had more time, you're going to get to CACS ir
10	our topic, one of our topics is on, yes. One of
11	our topics is on a just on a universal bills of
12	lading and displaying acreage potentially on your
13	certificate. I had a question from you with your
14	buyers
15	MR. YODER: Yes.
16	MEMBER BRUCH: has anybody
17	requested anything in addition to your
18	certificates in the past just to prove what you
19	grow is what you can sell?
20	MR. YODER: Our buyers have not other
21	than, you know, obviously they request a lot of

1	food safety paperwork, you know, our farm food
2	safety plans and all our gap certificates and
3	things like that but as far as for integrity
4	purposes? No.
5	MEMBER BRUCH: Yes.
6	MR. YODER: And we do sell direct to
7	Kroger's and Harris Teeter and places like that.
8	MEMBER BRUCH: Thank you, Raymond.
9	CHAIR POWELL-PALM: All right. Thank
10	you again, Raymond, thank you for your comments.
11	Next up
12	MR. YODER: Your welcome.
13	CHAIR POWELL-PALM: we have Doyle
14	Stoller, followed by Alan Lewis, David Meyer,
15	Jackie DeMinter, and then we'll take a break. So
16	thank you, everyone. The conversations have been
17	robust and we're running a little behind, which
18	is okay. All right. Doyle, yes, please go ahead.
19	
20	
21	MR. STOLLER: Hi. We are dairy

1	farmers in North Central Ohio. We've been organic
2	since 2001 before there was even a market, so we
3	clearly believe in the system. My dad's actually
4	on the board of directors of Organic Valley, so
5	but anyway, the reason I'm here. I don't want to
6	sound impersonal, but at the same time. So I can,
7	you know, keep everything clear and get away once
8	I'm just going to read a little bit here. I'm here
9	to highlight the importance and necessity of copper
10	and zinc hoof care products. Heel warms and foot
11	rot is present on most dairy farms. These two
12	pathogens were on our farm when we moved here in
13	1996. Most well managed farms use copper and zinc
14	products both and foot baths and sprays or salves.
15	Without these products, heel warts and hoof rot
16	would rapidly become the top animal health and
17	welfare concern in any farms. While some
18	conventional farmers use antibiotics or dangerous
19	products like formaldehyde, most conventional and
20	all organic farmers use safer copper and zinc
21	products treatment for cow's feet. Most effective

1	salves and sprays contains zinc sulfate, zinc
2	oxide, and/or zinc chloride. For some reason,
3	zinc sulfate was not allowed for a few years, which
4	is part of why I'm here, I don't want copper sulfate
5	to go by that road. And foot problems are painful
6	and animal welfare suffered on our farm because
7	there was some products we were using but we're
8	not allowed to use anymore. Most everyone would
9	also agree that the best hoof programs alternate
10	products and active ingredients. For example, our
11	hoof trimmer advised us to use a product called
12	PINXAV, it's actually a baby diaper rash ointment.
13	We use it on her own children, even as infants.
14	I submitted it for review and all the ingredients
15	are acceptable except for the active ingredient
16	which is zinc oxidize. Most good hoof healthcare
17	options are not allowed because zinc oxide, zinc
18	chloride, or zinc oxide origin are their active
19	ingredient. This is very confusing due to the fact
20	the zinc oxide and zinc chloride are an acceptable
21	organic feed ingredient. If I can feed these

1	products. Confusing, why can't my cow step in it?
2	Copper sulfate is good and is most commonly used
3	as a foot bath ingredient. Most organic farmers
4	use this in foot baths as stated earlier, because
5	the zinc options are not allowed and it is important
6	that we still have this, however, we don't feel
7	copper is as effective as zinc products when
8	sprayed or wrapped on feet. And also when using
9	only copper, it can build up in the soil and can
10	cause copper toxicity. On the other hand, zinc
11	is always deficient and beneficial in our soils
12	and the cropper removal rates are much higher.
13	And I've never heard of zinc being a problem in
14	as far as in the soil. So from my perspective,
15	I think it'd be very beneficial if we can have zinc
16	oxide and zinc chloride as well as copper and zinc
17	sulfate and they are acceptable for feed, it seems
18	like they should be okay for feet.
19	CHAIR POWELL-PALM: Thank you for your
20	comments. We don't get we haven't heard much
21	about livestock. So this is great. Kayla, please

1 go ahead.

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2 MEMBER SMITH: I don't have a question,

3 Nate. Don't chastise me. I have a comment.

4 CHAIR POWELL-PALM: Again?

So zinc sulfate was in MEMBER SMITH: the same place before this copper sulfate being allowed and the zinc sulfate not being allowed. And so it was petitioned. So anybody out there listening who is wanting to petition those, that's how we got them onto the list. So that could be submitted as a petition to the Board and we will go through a rigorous review process and we will vote them on or off so that let's someone to try to get them petitioned on. But zinc sulfate was in the very same space before where there were certifiers who were allowing it based, again about being able to feed it to animals, it's a helpful mineral. And so we were like because see that to animals, it should be allowed as a topical and several certifiers got in trouble for that. So hence, the petition process and now it's on the

1	list.
2	CHAIR POWELL-PALM: So there is the
3	path forward. All hope is not lost. So yes, the
4	team at Organic Valley can probably be a really
5	great resource to write up a petition for us as
6	well. So thank you so much for your comments
7	today. Really appreciate your time. All right.
8	Moving along. We next have Alan Lewis, followed
9	by David Meyer, and then Jackie DeMinter.
L 0	MR. LEWIS: Nate, the moment you said
L1	that I lost video so I'm going to continue with
L2	audio only; is that okay?
13	CHAIR POWELL-PALM: That's just fine,
L 4	thank you.
L 5	MR. LEWIS: Sorry about that.
L 6	CHAIR POWELL-PALM: No worries.
L7	
L 8	MR. LEWIS: Alan Lewis from Natural
L 9	Grocers and I have some comments from 36,000 feet.
20	I spent a good part of last year working with IFOAM
21	Organics International under the Organic 3.0

1	rubric, with the leadership from five different
2	continents in some very complicated midnight
3	conference calls. But it really is highlighted
4	the difference between U.S. framework for organics
5	versus the global organic movement, which is so
6	focused on community and equity and sovereignty
7	and security as the long-term values. And I just
8	want to drive this point home when we look at
9	hydroponics in the U.S. I remember speakers
10	talking about the four trophic levels of
11	hydroponic, and how that qualified as a active
12	biological system. But really it's for
13	catastrophic levels of hydroponic because we have
14	270 berry operations in containers in Mexico, 75
15	tomato operations of Mexico. And these cover
16	miles of land with hoop houses. It's not
17	well-paid, humane, fair, just labor. There's no
18	sanitation. They're using water that there is not
19	enough of. And they're returning it polluted to
20	the landscape. Those trophic levels, but there's
21	nothing for us to brag about. And that is

1	primarily CCOF Primus in berries, CCOF Primus tilt
2	and tomatoes. So why does that matter to us? It's
3	just Mexico. But we're losing small holder
4	organic farmers in the U.S. because the price
5	premium is disappeared. It's now a disadvantage
6	to be an organic berry or tomato grower because
7	you will see side-by-side an identical product for
8	\$1 less per pint, \$2 less per pint on the shelf.
9	So retailers like Natural Grocers can't sell real
10	berries because our competitor next store is
11	selling the hydroponics. This is broken our
12	system. And IFOAM International looks at the U.S.
13	as a cautionary tale, not as a leader and not as
14	a partner in many ways. It's very much a
15	cautionary tale. Lastly, now we're moving in a
16	synthetic biology. You've heard the buzzwords:
17	tools in the toolbox, science-based policy, yada,
18	yada, yada, gene-edited seeds, seed coatings, RNA
19	applications. Those are all science and we can
20	do science state policy around them, but we can't
21	do science without ethics. And look at

hydroponics as a broken system of ethics for what 1 we've done to ourselves by not really addressing 2 the consequences. 3 The concentrations of wealth, ownership, and control in just that sector have 4 5 overwhelmed us. And that is my comment. 6 you, Nate. 7 CHAIR POWELL-PALM: Thank you so much, Alan. Any questions from the Board? 8 Hearing 9 that, I'll just pose, right at the end there, Alan, concentration in ownership of means of production 10 11 for agriculture. I had mentioned vesterday that 12 it's actually quite tricky and a lot of my world, a lot of rural America to find organic products. 1.3 I believe you had said, Go to your local co-op 14 or your Natural Grocers. Those only exist in the 15 biggest cities, at least in Montana. 16 So where -how do we get to this point where honestly gas 17 18 stations are carrying organic. How do we make it 19 so that where people buy food is where organic is 20 available? How do we grow this so that it's not

niche, it's not only in our biggest cities that

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do we need to do? 2 3 MR. LEWIS: Well, we made a deal for the devil to get non-seasonal production down in 4 Mexico and other places to get a year round supply 5 6 that's cheap and that's pushed into the 7 distribution system like McLane or Shamrock or U.S. Foods that's going into convenience stores and 8 9 small groceries. So the cost of that is we no 10 longer have local food systems. So that grocery 11 store is only buying from a distributor who's 12 sourcing globally. And at the same time, even if 13 that grocery store manager runs a farm and he wants to grow berries, he has no or she has no ability 14 15 to sell those berries at the store. We've broken system from logistics, to local health 16 17 ordinances, to consumer acceptance of local goods. 18 That's the right question, but we really need to 19 look away from the U.S. to answer that question 20 for how to move forward, or I would say look to the Real Organic Project, who does bring ethics 2.1

we can find organic, but it becomes the norm?

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into science-based policy, and does embed culture 1 and agriculture into communities, as opposed to 2 3 just thinking of it as a commodity with a specific set of characteristics. 4 Thank you for your 5 CHAIR POWELL-PALM: 6 comments today. Really appreciate your time. 7 Next up, we have David Meyer followed by Jackie DeMinter, and then we'll all take a well needed 8 9 So please, David, go ahead. break. 10 MR. MEYER: Hello, everyone. And 11 thank you for your time. As a former farm kid, 12 I want to just say thanks for all the Board members. I grew up on a small farm in Central Wisconsin, 13 I really appreciate and I understand how much time 14 15 and effort it takes to serve on the Board and this is a very important topic. I'm going to talk about 16 pectin, so change up a little bit here. 17 18 going to talk about food ingredients and 19 specifically about pectin, non-emanated forms of 20 pectin. On the national list of non-organically produced agricultural products 2.1 allowed

as

ingredients in or on process products labeled as organic.

3 Next slide, please. Pectin is used in variety of food applications. It's found in 4 almost all plant material. 5 However, it has a really unique functionality that we 6 use for 7 particular products. Jams and jellies is the top Pectin is the only ingredient that's allowed 8 one. 9 in standard of identity products that can be sold as organic, and it provides that unique, spreadable 10 texture that we're used to. 11 It's also used in 12 bakery, breads, cakes, muffin. It enhances the freeze possibility that increases volume in those 13 products, it's very important. 14 In bakery and 15 fruit yogurt preparations, this is an alternative It creates texture and it allows baked 16 to starch. 17 stability so you can bake those without having it 18 fall all over or leak out into the oven. Ιt 19 delivers better fruit flavors compared to starch. 20 We use it in yogurt white mass as well to create body and mouth feel. It's using a variety of 2.1

beverages from fruit juices to coffee beverages. 1 It protects proteins from having aggravation as 2 3 their process. And then of course, confectionary We all love gummy products and pectin can 4 be used there as well. 5 Next slide, please. So pectin is very 6 unique, in the gel texture it provides, the protein 7 stabilization it provides, the mouth feel 8 9 beverages, and the accessibility. You can see some of the other hydrocolloid alternatives that 10 11 we have, carrageenan, locust bean gum, guar, among 12 others, none of them create exactly the same 13 attributes that we see in pectin. So I just want to go ahead one more slide 14 15 and I'm going to answer this. The availability of organic pectin. So organic fruit we see all 16 17 over, right? But the vast majority of organic 18 fruit is sold as whole fresh fruit. And therefore, 19 there is neither the quantity nor the quality of 20 organic peel available to produce organic pectin commercially. And that's why we need to have it 21

on this list. Thank you very much for your time. 1 2 I appreciate it and I'd be happy to answer any 3 questions. CHAIR POWELL-PALM: Thank you for such 4 a clear presentation. I believe, Brian, did you 5 6 have a question? I saw your hand go up for a sec. 7 MEMBER CALDWELL: I did. It's about organic availability and I guess I would like to 8 9 ask David. Thanks for your comments. And are there other sources besides citrus peels for pectin 10 11 like, I don't know. Well, anyways, are there other 12 ones and maybe could be supplied organically, I'm 13 wondering. There are other sources. 14 MR. MEYER: I mean, apple would be the other major source that 15 we would see. However, the apple organic market 16 also is sold primarily fresh as whole apples. 17 18 anytime it goes to the consumer in a whole fresh 19 fruit option, then we don't have the opportunity 20 to get the pectin out of that. So that is also problematic. There's pectin in sugar beets also, 2.1

1	but it creates some problems in that different
2	pectins act differently. So citrus fruit is the
3	best choice as far as creating a strong gel for
4	the jams and jellies that we're looking for. And
5	that's why it's used. You know, there are some
6	other sources but different pectins definitely
7	react very differently. And at this point, there
8	just aren't enough, you know, organic sources of
9	any of those others to use.
10	MEMBER CALDWELL: Thanks a lot.
11	CHAIR POWELL-PALM: Thank you for your
12	comments today. Appreciate it. All right. Next
13	up Dilip, go ahead. I'm sorry.
14	MEMBER NANDWANI: Sorry, I took a
15	second to raise my hand.
16	CHAIR POWELL-PALM: Not a problem.
17	MEMBER NANDWANI: You know, the pectin
18	we probably all know that it's a cementing material
19	between the cell wall probably, I mean, I see
20	you're nodding and I think we all know that. So
21	organic sources are limited and I'm just wondering

1	that, what can you tell us a little bit about its
2	manufacturing or the processing from the fruit such
3	as you mentioned oranges or can you just quickly
4	tell us a little about that? Thanks.
5	MR. MEYER: About how it's
6	manufactured? Is that what you're
7	MEMBER NANDWANI: That's right. How
8	do you
9	MR. MEYER: Yes. So I'll just give you
10	a citrus example because that's primarily where
11	we get most of our pectin. So the citrus fruit
12	industry, they harvest the oranges, or limes, or
13	lemons. The first thing they do is juice them.
14	So they take that juice, and that juice is
15	concentrated, used for fruit juices, those things.
16	The next thing they would do is take out the oil.
17	So citrus oil can be used for a lot of different
18	things. The primary use in the U.S. is for like
19	sodas, right? So they extract that as well.
20	Next, we have you would take that and then that's
21	where so you have, what's left is cellulose,

1	hemicellulose, and pectin. And then we would
2	extract that pectin out of that matrix of cellulose
3	and hemicellulose using a low acid and heat
4	extraction, okay? So that's how we would get it
5	out and then it's dried down from there and sold
6	as pectin.
7	MEMBER NANDWANI: Thank you for that
8	information. I appreciate that.
9	CHAIR POWELL-PALM: Yes. Thank you,
10	David. Next up, we've got a Jackie DeMinter and
11	then we'll break. After the break, we have Mike
12	Dill, Adam Lazar, and then Michael Hansen. So
13	Jackie, the floor is yours.
14	
15	
16	MS. DEMINTER: Good afternoon. My
17	name is Jackie DeMinter. I am the certification
18	policy manager at MOSA. Thank you for your work
19	and for providing this meeting in a virtual format.
20	We certify over 2,000 organic operations
21	throughout the U.S., including over 1,750 with

1	crops, 730 with livestock, and 325 handlers. I'll
2	summarize our written comments on sunset materials
3	and highly soluble nitrogen fertilizers. I'll
4	highlight just a few sunset materials. Livestock
5	materials, glucose containing products are
6	typically used as an electrolyte in our experience,
7	we have almost 20 inputs containing copper sulfate
8	used by approximately 115 clients. Lidocaine is
9	one of the most common pain relievers in use by
10	more than 100 clients primarily for dehorning, crop
11	materials, biodegradable, bio-based mulch film.
12	We are not aware of any 100 percent bio-based,
13	biodegradable mulch film. Due to this, no
14	products are in use by most clients, however, more
15	than 210 MOSA certified operations are using a
16	synthetic plastic mulch. We encourage review of
17	products available on the current market to ensure
18	potential for compliance with all four review
19	criteria and if none are available, sunsetting the
20	listing. Humates, humic acids, and fulvic acid
21	are very common ingredients in crop products; 94

1	inputs of humates as the ingredient are in use by
2	hundreds of MOSA clients. Almost 60 inputs
3	contain humic acids, approximately 45 inputs
4	contained fulvic acid. Fulvic acid review
5	criteria differs than that only non-synthetic
6	acids or water are allowed as extractants, as for
7	humic acid, alkaline extracts are also acceptable.
8	Micronutrient use is very common. More than 200
9	micronutrient inputs are in use by hundreds MOSA
10	clients. Of the handling materials, diatomaceous
11	earth, nitrogen, carbon dioxide, sodium
12	phosphates, casings, and pectin are the most common
13	materials MOSA clients use. Finally, regarding
14	highly soluble nitrogen fertilizers. We
15	appreciate the NOSB working to solve concerns
16	before they may develop. However, in our work we
17	have not experienced sodium nitrate being used in
18	a manner that is concerning nor do we have any
19	clients using a natural ammonia extract product.
20	From our perspective, it looks like the proposal
21	will impact guano and sodium nitrate in use by MOSA

1	certified clients and would create additional
2	steps in our review work but not change the inputs
3	MOSA clients use. Ultimately, we want to maintain
4	our ability to discern when organic integrity is
5	negatively impacted or threatened by the use of
6	these materials without any additional unnecessary
7	review work. In closing, thank you for the long
8	hours you commit to this work and thank you for
9	the opportunity to comment.
10	CHAIR POWELL-PALM: And thank you for
11	your time preparing those comments today. Any
12	questions for Jackie from the Board? I have one
13	for you, Jackie. I have two actually and I realize
14	we're about to break, so pressure's on.
15	MS. DEMINTER: Okay.
16	CHAIR POWELL-PALM: How do we get
17	what is it that's holding us back from MOSA
18	realizing 4,000 clients instead of the current
19	2,000? What is it that will allow us to make it
20	so that organic is such an obvious route?
21	MS. DEMINTER: Boy, that's a tough one

1 to answer, Nate. Capacity comes to mind right As far as, you know, expanding the capacity 2 away. 3 to do the work, the boots on the ground, the inspectors, the reviewers, the career path for 4 5 individuals that could stand from development 6 work. 7 CHAIR POWELL-PALM: Okav, So human capital; we are on that. Absolutely. 8 Could you 9 clarify just a little bit? In there you were 10 saying that you appreciate the opportunity to 11 monitor organic integrity for highly soluble nitrogen products but don't want additional undue 12 review work. What review work do you do now for 13 sodium nitrate? And is there a way to make it 14 15 fairly easy to analyze? Well, I don't know the 16 MS. DEMINTER: 17 answer to that second, and I don't know of how easy 18 to analyze necessarily. In our experience, and 19 I detailed this in the written comments, the inputs 20 that we see and used by our clients, not speaking for all areas of the United States by any means 2.1

1	are not of concern because the sodium nitrate is
2	usually an ingredient in a multi-ingredient
3	product in a vast amount of inputs in use by
4	clients. So we can look at the file, look at their
5	input inventory, and see that they're not abusing
6	the use of this input. As far as work is that we
7	do right now, since we do not have the 20 percent
8	restriction effective anymore. We don't actually
9	measure that or do the math, but we used to do that.
10	And in every case we never once discovered that
11	it was in use in amount greater than 20 percent,
12	even though we put the numbers on the paper, and
13	did that work. We just in our experience, don't
14	have the concern for abuse or overuse of a highly
15	soluble nitrogen fertilizer by our clients. There
16	are a couple of clients who use like a 16-0-0
17	product. But again, it's one of many, many
18	products, and they're using it in extreme times
19	or when soil temperatures aren't warm enough or
20	things like that as we've heard other commenters
21	saying.

1	CHAIR POWELL-PALM: All right. I
2	appreciate that. Okay. Thank you so much for
3	your comments today.
4	MS. DEMINTER: Yes, thank you.
5	CHAIR POWELL-PALM: So it is just
6	almost to the top of the hour, so let's come back
7	in 15 minutes. And after our break, we're going
8	to start with Mike Dill, followed by Adam Lazar,
9	and then Michael Hansen. And so come back at 12
10	after the hour. All right. Thanks, everybody.
11	See you in a bit.
12	MS. ARSENAULT: Thanks, Nate.
13	(Whereupon, the above-entitled matter
14	went off the record at 1:57 p.m. and resumed at
15	2:12 p.m.)
16	CHAIR POWELL-PALM: And we're back, 12
17	after the hour. Hope everyone was able to grab
18	a snack and get ready for some more input from the
19	community. All right. So first up, we've got
20	Mike Dill, followed by Adam Lazar and then Michael
21	Hansen. All right. Floor is yours, Mike.

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1	MR. DILL: All right. Thank you.
2	Good afternoon, everyone or good morning. My name
3	is Mike Dill and I'm representing the Organic
4	Produce Wholesalers Coalition. The OPWC is
5	comprised of seven businesses that distribute
6	fresh organic produce to customer located across
7	the United States and internationally. I'll be
8	commenting on technical support for NOSB and
9	modernization of supply chain traceability. Or
10	technical support, OPWC recognizes both the work
11	load and lack of compensation limit the pool of
12	people who are able to serve as volunteer members
13	of the NOSB. And we support the NOSB receiving
14	more technical help. That said, the work of any
15	technical supporter should be subject to conflict
16	of interest declarations and confidentiality
17	agreements. We feel there are some types of
18	technical support that are not appropriate to
19	support the NOSB, and those include but are not
20	limited to serving as the primary author of an NOSE
21	or subcommittee document, initiating polls of

stakeholder groups, input into the subcommittee 1 2 or board decision-making process, and 3 communications on behalf of the NOSB or subcommittee. 4

> Related to modernization of chain trace ability. We again greatly appreciate CCS's focus the traceability in fraud on We support the standardization BOLs, prevention. but strongly oppose the requirement to list acreage on certificates for produce operations. In the fall 2021 proposal on this topic, the subcommittee stated this, the NOSB recognizes the need to not burden organic farmers, certifiers, or inspectors with additional paperwork. OPWC asserts that this proposal would result in heavy paperwork burden for specialty crop growers and buyers. Requiring acreage on certificates, especially by crop, would lead to more unnecessary non-compliances for certified operations, that failed to disclose every change in planting quantities. A compliance issue that is not related to organic integrity.

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This in turn would disrupt and slow down product movement through the supply chain. Additionally, it would shift the focus of inspections even further toward paperwork rather than on practices and organic controls. We provide more detail about this burden in our written comments and I encourage you to consider them when finding future work on this topic.

I'd like to use the rest of my time to bring again forward OPWC's suggestions building out handling standards at 205-270. We acknowledge that there many competing are priorities at this time, however we feel that the concept should be high on the list as it would positively impact every certified operation, as guide for the currently well as provide а uncertified handlers that SOE will require become certified for the first time. We also note that there are elements of handling and at least 10 to the 23 backlogged NOSB standard recommendations. Creating distinct handling standards offers an

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1	efficient way to address these points
2	systematically while clearing the backlog.
3	Comprehensive handling standards will benefit
4	certified operations, inspectors, and certifiers
5	by clarifying record keeping requirements related
6	to handling activities, as well as organic controls
7	between harvest and processing or distribution.
8	Standards also provide the basis for holding
9	certified operations accountable for all their
L 0	handling activities. It is our hope that the CACS
L1	will assess our proposed handling standards and
12	consider them for future work agenda item. Thank
L3	you.
L 4	CHAIR POWELL-PALM: Thank you so much
L 5	for your comments, Mike. Jerry has a question.
L 6	MEMBER D'AMORE: Yes, sir. Mike,
L7	thank you very much for the comments today and an
L 8	extra shout out for your team and the written
L 9	responses that you gave to the NOSB technical
20	support discussion document. Your answer those
21	questions that we had in there doesn't even need

review, there were so thorough. But I'd like to 1 focus on a sentence that you had in the preamble 2 3 or the opening paragraph and maybe my question doesn't have an answer because maybe there was this 4 one sentence is so self-understood that there's 5 6 not much expounding that you can do about it or 7 In there you write, or one has written, on it. we recognize that both the workload and the lack 8 of compensation limit the pool of people who are 9 able to accept nomination for the NOSBC. 10 Now 11 again, that's in my mind, I just -- a true and 12 obvious statement. But as you wrote that, was there a path that you took, you know, a analysis 13 Is there more meat that you can 14 that you made? 15 put on that particular subject? I really wish we could. 16 MR. DILL: Τ 17 think it's one of those things that we all as a 18 community understand is an deterrence from being 19 on the Board. And I know there's limitations to, 20 you're prohibited from compensating folks, but maybe there's other ways around it. We haven't 2.1

1	put that at top of our agenda to really, you know,
2	assess alternatives. You know, there likely are,
3	maybe there's ways that we could I'm just throwing
4	something out theoretically, but maybe someone
5	that's a crop grower and that they get free
6	certification if they are on the NOSB or, you know,
7	maybe we can get creative with it. But really we
8	just, you know, we feel it's unfortunate that the
9	workload is so heavy and it requires so much time
10	in that it does require kind of a sponsor, you know,
11	in organization like ourselves, you know, we could
12	absorb the cost to have someone sit on the NOSB,
13	but a small farmer, you know, definitely can't.
14	There's too many competing priorities. So I
15	just, I think it's fair to acknowledge that and
16	we state it here as a way to say that we definitely
17	support NOSB members having some sort of support
18	system that might help reduce that workload so that
19	it can be more manageable.
20	MEMBER D'AMORE: Well, you did a
21	wonderful job with, perhaps an awkward question

1	that was so open-ended. This is, I've been going
2	into my third year on the Board and every single
3	session that I participated in, our whole
4	self-evaluation of diversity, inclusion, equity.
5	You know, we're pretty hard on ourselves there
6	and then the community rightfully so, is was pretty
7	hard on us as well. And I found that one sentence
8	to be extremely meaningful and you filled in some
9	blanks there, but extremely meaningful in terms
10	of our future capability, should we get something
11	like put together to address exactly that issue.
12	So I see a lot of the document and I can't thank
13	you folks enough for being so diligent in all that
14	you've done with it. I will share with you that
15	today
16	CHAIR POWELL-PALM: I'd like to
17	quietly cut you off, Jerry. Only for time.
18	MEMBER D'AMORE: One time. Okay.
19	CHAIR POWELL-PALM: Go ahead, go
20	ahead.
21	MEMBER D'AMORE: No, I just wanted to

1	comment to Mike that universally, there's nobody
2	in opposition to this, but there's a thousand
3	different ways and suggestions of getting it done.
4	And that makes it challenging. And when people
5	are willing to put so much thought into it, it's
6	very helpful. Thank you very much.
7	MR. DILL: And we thank you for your
8	time and dedication.
9	CHAIR POWELL-PALM: Kyla has a
10	question.
11	MEMBER SMITH: Hello, thanks for your
12	comments. I was wondering in regards to the
13	revision to the handling standards if you felt
14	if this were to become a work agenda item. If you
15	felt it was important to have SOE across the finish
16	line first or if work could be done prior to seeing
17	the finalized form of that rule?
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19	MR. DILL: That is a great question and
20	one that we have been, you know, kind of grappling
21	with a little bit. It's like, how hard do we push

1	for this without knowing what SOE is going to look
2	like exactly. As you know, that's where, you know,
3	handling standard concept originated is to our
4	response to SOE. And I think we all just want to
5	see what that looks like. So I think right now
6	is a good time to assess it as a future work plan.
7	And, you know, I think myself and the rest of the
8	community, has our fingers crossed that we'll see
9	SOE pretty soon. But I we just feel that it's
10	so important to get clarity around this, and
11	really, you know, move forward. I don't
12	personally think that SOE is going to have a lot
13	of the elements in it that we are asking for. And
14	I think a good example is like sanitation. We
15	talked so much about sanitizers on the list and
16	that's really all the the only place they appear.
17	And then in the standards it's preventing
18	commingling and contamination. But wouldn't it
19	be great to have a set of standards or a portion
20	that talked about what is required for sanitation,
21	intervening steps. And you know, just ways that

limit the -- eliminate the need for, you know, 1 certifier interpretation or review of like a SOP 2 3 for each, you know? Because what we're doing right now is we submit an SOP and the certifier says yes, 4 that looks good or it doesn't based on your 5 preventing contamination, but we don't know what 6 7 that really looks like. So and then as it relates backlog of, 8 the you know, NOP standard to 9 recommendations, I feel that maybe it's a good idea to try to implement handling standards at the same 10 11 time or even before doing that so that we don't 12 have to, you know, consider handling portions of each one of those you know, standards as we work 13 through those. 14 15 CHAIR POWELL-PALM: Thank you for your comments, Mike. All right. Next up, we've got 16 17 Adam Lazar, followed by Michael Hansen, and then 18 RedElisa Mendoza, I don't think we're seeing you vet. And Carol Walker, if you can make yourself 19 20 That'd be great. Okay. known. Adam, please go ahead. 2.1

1 MR. LAZAR: Thank you very much for 2 having me, everybody. My name is Adam Lazar. 3 the founder and CEO of Asarasi. We're a plant source water company. And I'm going to show with 4 you for a few minutes just how we can advance 20,000 5 6 North American farmers becoming organic certified 7 and changing the face of the organic industry by talking about something really simple called 8 9 water. Next slide, please. 10 Now, we know water 11 is an enormous global issue that affects farmers 12 and everyone right here at home from consumers and households alike and with stage 2 tear water 13 restrictions in the U.S. on the Colorado River. 14 15 been a better time to find There's never alternative sources of pure water. 16 Next slide, please. 17 I discovered a 18 byproduct of the maple industry, which is a sugar 19 free maple sap, which was elementally pure water 20 about ten years ago and I started leveraging this 2.1 water to bring this into the bottled water

industry. And today we are the only certified organic plant source of pure water in the world through NOFA and Baystate Organics. And we're accelerating our growth by delivering our products all over the world as a trustworthy source alternative for water.

slide, please. farmers Next Now, harvest their maple crop by tapping maple trees and we all know this tradition goes back hundreds of years. They now are processing their maple sap with reverse osmosis and taking the sugar molecule out of the sap. And for every gallon of maple sugar that they concentrate by this by this process, they consolidate about 49 gallons of a pure water byproduct that they throw away. And this is where we come in and buy this byproduct from these family farms, advocating on their behalf to make double their income on their existing maple crop with very little extra labor.

Next slide, please. So from a purely analysis perspective, all water that comes from

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a municipal spring, lake, aquifer, any sort of 1 supply is highly chlorinated, highly fluoridated, 2 3 highly contaminated, polyfill alkalines, uranium and radium-226. And there's no end in sight for 4 And this water is exempt as 5 the contamination. 6 an ingredient in the Organic Program today and 7 being used in all organic food and beverage products. 8 9 Next slide, please. So with 1 billion 10 gallons of available tree water, we represent over 11 a 110 family farms to date, organic certified 12 farms, that double their money on their net income by just simply selling us these pure water by 13 And this is a huge advantage for the 14 products. 15 industry, as well as the organic certification 16 community. 17 Next slide, please. This can scale to 18 over a trillion gallons domestically alone. 19 20,000 with U.S. and Canadian maple farms 20 processing these products, this is a huge economic win for the farms and a huge environmental win for 2.1

the groundwater supply. Next slide, please. 1 make lots of different products from probiotics 2 3 seltzers, hard seltzers, sodas, teas for Walmart, Costco, and the like. And it's amazing the impact 4 in the reception we've gotten from consumers with 5 Next slide, please. 6 our products. We've even 7 used it to make beer with Anheuser-Busch, zero groundwater beer, plant source organic beer. 8 9 Imagine that. Next slide, please. So the problem is 10 11 today water is the number one exempt ingredient 12 in the NOP by volume estimated. And many products from chlorinated PFSA contaminated 1.3 are made 14 purified sources. And this exemption 15 disadvantage is 20,000 North American farmers. these products you see here are organic 16 All certified and 99 percent of their product does not 17 18 even organic. 19 Next slide, please. And I'll wrap up 20 with this. So I'm asking you to remove the ingredient exemption for water, allow the product 21

1	formulations to be enhanced. The purity claims
2	for water-based organic products accelerates
3	thousands of North American farms are advantaged.
4	Consumer confidence and authenticity is
5	increased. Manufacturers realized authentic
6	claims. Groundwater is saved and you-all meet the
7	sustainable development goals you're after and
8	make the world a better place. So thank you for
9	allowing me the time to share this really
10	interesting and highly sensitive topic with you.
11	And I welcome, I'm sure that myriad of questions
12	you were have. Thank you.
13	CHAIR POWELL-PALM: Thank you for your
14	comments. Any questions from the Board? See
15	none. We appreciate your time oh, Amy, go
16	ahead.
17	MEMBER BRUCH: Adam, I just was going
18	to say thank you for bringing this to our attention.
19	I really appreciate it. Really interesting.
20	MR. LAZAR: Thank you very much.
21	CHAIR POWELL-PALM: All right. Thank

you, Adam. Appreciate your time today. Next up 1 is Michael Hansen, and then RedElisa Mendoza, and 3 Carol Walker. So please go ahead, Michael. MR. HANSEN: Yes. Can you hear me? 4 5 CHAIR POWELL-PALM: We can. 6 7 MR. HANSEN: Yes, you can. All right. 8 9 So my name is Michael Hansen, I'm a senior 10 scientist at Consumer Reports, which is an 11 independent non-profit, nonpartisan organization 12 that works with consumers to create a fair and just marketplace. We have over six million members. 13 My comments today are going to focus on the 14 15 materials some committees excluded methods and We have been supportive of the excluded 16 proposal. -- of the subcommittees excluded methods work which 17 18 has spanned almost a decade. And we have supported 19 all the proposals that the board has unanimously passed to date. We strongly support the present 20

and that's where the -- that

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recommendation,

recommendation is for the NOP to develop a formal
guidance document to include the definitions,
criteria, and excluded methods tables that have
been developed by previous board proposals. And
we also agree with the addition and the definition
for both self fusion and protoplast fusion that
are in that proposal. But there's one small change
that needs to be made to the definition, and that's
where they refer to techniques utilizing
recombinant DNA .That's old terminology from about
20 years ago when basically what they were doing
was moving DNA between organisms. But we now know
that you can actually not only manipulate DNA, you
can manipulate RNA as well. And so, rather than
just use the term, Recombinant DNA technologies,
the proper terminology should be, In vitro nucleic
acid technologies. So in the definitions where
it says, Techniques of recombinant DNA, those
should be changed to, In vitro nucleic acid
technologies, because it has, as I said, I would
point out that with gene editing, for example, for

1	CRISPR, which we're actually engineering is
2	messenger RNA, right? That there's a guide RNA.
3	And I would also point out that in the future,
4	they're probably going to be engineering of
5	ribosomal RNAs and probably transfer RNAs. And
6	so that's why we think it's important that you
7	change the definition. And that makes it more
8	comprehensive and it also is the definition used
9	by Codex Alimentarius, which is a global network.
10	And I would just point out that the Codex
11	guidelines prevent food production, processing,
12	marketing, and labeling of organically produced
13	foods used this language, so it would be good.
14	And then finally, we also support the change in
15	the current regulation 7 CFR 205.2: Terms defined,
16	so that the definitions of excluded methods and
17	everything in the NOSB proposal has should be
18	added to regulatory language, so that can be used
19	at a future as a regulatory framework for the class
20	of excluded methods, because these technologies
21	will continue to evolve. And as I said, one day

1	they're probably start engineering RNAs and
2	transfer RNAs. Thank you.
3	CHAIR POWELL-PALM: Thank you so much
4	comments. We have a question from Dilip.
5	MEMBER NANDWANI: Again, this is not
6	a question, just a comment and echo. This is very
7	well presented, Michael. Really appreciate your
8	thoughts and I agree with your comment that RNA
9	and DNA they are absolutely nucleic acids and
10	that's a very valid point. Thank you for your
11	comments, again.
12	MR. HANSEN: Yes. I'd just like to
13	quickly say that we saw this was happening, and
14	so that's why I was on the delegation. We made
15	sure that this definition got accepted globally
16	at Codex because we saw that this was going to
17	happen that one day, they would engineer these
18	other things. So thank you.
19	CHAIR POWELL-PALM: Brian, please go
20	ahead.
21	MEMBER CALDWELL: Thanks, Michael for

all your work on this amazingly complicated topic. 1 I'm just looking to the future. And usually if 2 3 you have any ideas about how we can enforce and monitor new varieties that may come about using 4 some of the genetic editing techniques that maybe 5 are not, you know, it's not on the label, it's not 6 7 necessarily disclosed in the variety description or any other place. Or maybe I'm wrong. 8 9 that's not going to be the case, but I'm just 10 curious what your thoughts are on that.

> While the -- this is MR. HANSEN: instead of whether you can detect the changes and I'll say yes, if you have the before and after, you can absolutely detect those changes because even when they use gene editing like CRISPR, it doesn't make just that one edit, it makes all these other edits which actually can be detected, because it should be pointed out, people that developing these technologies they need a way to detect it as well, so that they can stop others infringing on your intellectual from quote,

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1	property. So they try to tell you that for
2	example, with CRISPR, there's no way to detect it.
3	That's just not true. If we have the before and
4	after, it can absolutely be detected. And the
5	companies that are developing this know this
6	because that's why they always make sure that they
7	can enforce their intellectual property.
8	MEMBER CALDWELL: Great, that's really
9	good to know. Thank you.
10	CHAIR POWELL-PALM: Any other
11	questions from the Board? All right. Thank you
12	so much for your comments, Michael.
13	MR. HANSEN: Thank you.
14	CHAIR POWELL-PALM: I think we're
15	going to be with RedElisa Mendoza and Carol Walker.
16	I don't think we see on, please make yourself known
17	if you are otherwise, come back. Next up will be
18	Doug Currier, followed by Malaika Elias, and then
19	Heather Spalding.
20	MR. CURRIER: Good afternoon. Good
21	morning. Wherever you are. My name is Doug

1	Currier. I'm the technical director at the
2	Organic Materials Review Institute, and I'm going
3	to talk today about the recommendation on highly
4	soluble nitrogen fertilizers. So my comments aim
5	to provide examples of how the use of the term or
6	the generic term nitrogen and the proposed
7	standards revision could need added clarification,
8	when assessing fertilizers that are coming right
9	in, at that three to one, carbon to nitrogen ratio.
10	As discussed in our written comments, the term
11	nitrogen is likely most commonly understood to mean
12	total nitrogen. Total nitrogen is the sum of
13	ammonia organic nitrogen, such as amino acids,
14	naturally occurring urea and proteins, nitrate and
15	nitrite. Of these nitrogen species, soluble
16	inorganic nitrogen such as ammonia, nitrate and
17	nitrite, are those for which NOSB has documented
18	their concern. The concern being that the use of
19	these materials goes against the principles of
20	organic production. Acknowledging that Soluble
21	inorganic nitrogen is the basis of concern, could

help stakeholders understand which materials are at higher risk of violating the proposed C to N ratio. Focusing on inorganic soluble nitrogen levels can also help with dealing with materials that border at or around three to one carbon to nitrogen. Examples are included in our written comments but I'll give one now.

The C to N ratio of bloodmeal could border at or below three to one carbon to nitrogen based on lab reports on file and armory, when using total nitrogen as the nitrogen value. The nitrogen in bloodmeal, however, will not come percent inorganic anywhere near 100 soluble nitrogen, which suggest just using that soluble inorganic nitrogen value in the ratio is going to provide a clearer picture of the material, not a Fish products and hydrolyzed soy are two other examples explored in the written comments. So the need for technical support for certain buyers and growers is an important factor to ensure successful implementation of standards revision

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that addresses highly soluble nitrogen products. 1 2 While I may share concerns raised by others 3 regarding the burden placed on certifiers, growers, material review organizations to ensure 4 materials below three to one C to N ratio are 5 6 identified, and their use restricted. We believe 7 that with clear messaging from NOSB, which answers behind standards revision 8 the why the 9 recommendation, combined with effective 10 accessible technical support outlets, is 11 possible enforce the proposed to standard 12 addressing these low C to N ratio materials. 13 you. 14 CHAIR POWELL-PALM: Thank you very 15 much for your comments. Any questions for Doug from the Board? Amy, please go ahead. 16 17 MEMBER BRUCH: Sure, Doug, thank you 18 for your time today and providing the written 19 And I appreciate your thoughts on this comments. 20 solubility piece versus the carbon and nitrogen I just had a question, kind of overall 2.1 ratio.

helpful to hear your perspective on components of 1 a blended fertilizer. I know in previous OMRI 2 3 comments you mentioned about isotope testing on finished products is hard to really deconstruct 4 5 those ingredients and I know, OMRI, you guys, work 6 implementing the NOP quidance on liquid 7 fertilizers for use. So you're doing increased level of inspections on those products that have 8 a high component of nitrogen. So I just wanted 9 10 you to maybe talk on that subject of the blended fertilizers. 11 12 MR. CURRIER: Yes. So we, in our 13 14 15

review, we're getting the formulation statement, we're getting the materials that are used in the products identified. And within those formulation statement review, we can identify nitrogen fertilizers, and we can then look at whether or not those nitrogen fertilizers are below three to one carbon to nitrogen or below. The tricky part becomes how to convey our findings to the public. And one way we -- the main way we do

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1	that is through a restriction and we could develop
2	a restriction that conveys, you know, what we've
3	found to in our review. Meaning, we could say,
4	you know, this product formulates with a material
5	that is below, you know, three to one carbon to
6	nitrogen ratio. And give some way for the
7	end-user, whether that's the certifier or the
8	grower to know that they have to think about the
9	product more, the fertilizer more in regards to
10	limiting its use. So I guess, that's one thing
11	that comes to mind in regards to using a restriction
12	that we can convey findings in our review and
13	blended fertilizers are very common, and we would
14	I would imagine we would be able to look at that
15	level within the blend in order to know which are
16	materials of concern, which are not. And then
17	restrict.
18	MEMBER BRUCH: Thank you, Doug.
19	Appreciate it.
20	MR. CURRIER: Sure.
21	CHAIR POWELL-PALM: Thank you for your

comments, Doug. Oh, Dilip has a question. 2 MEMBER NANDWANI: Oh, very quick. 3 Doug, I am a new member, so please bear with me if I'm just trying to understand. Can you tell 4 us a little bit about how you enlist a new product 5 or material in OMRI list. 6 The reason I'm asking 7 is let's say humic acid and folic acid, they are two example I wanted to ask you. There are tons 8 9 of, you know, companies they're also making the 10 same product, same name, they are manufacturing 11 or processing, whatever you want to call is the 12 So I'm just wondering, some humic acids are accepted and they're listed in OMRI and some they 13 So can you tell us a little bit about 14 are not. How do you make this -- you know, the 15 distinction that this has to be listed on the 16 national list and this, you know, we cannot accept 17 that? Thank you in advance. 18 19 MR. CURRIER: Yes. So really quickly, you know, we go through a thorough review, that 20 includes, you know, the formulation statement 21

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1	review, table review. We're looking at
2	manufacturing processes, lab analysis, if needed
3	in some cases, with humic and folic acids, you know,
4	there's, you know, a synthetic allowance at 601
5	for humic acid extracts. You know, we are looking
6	at the extract in use, looking for fortification
7	potential. And so there's a variety of ways that
8	we could get to a recommendation to allow versus
9	prohibit. One would end up on the public list,
10	one wouldn't so you know, those are just some of
11	the really basic kind of approaches that we use
12	and could end up with a decision that seemingly
13	is in conflict because it's, you know, seemingly
14	the same material. But yes, something in there's
15	going to be driving us towards a prohibited
16	decision.
17	MEMBER NANDWANI: This comes from the
18	NOSB Board recommendation to you also. So that
19	also keep in consideration or you have your own
20	methods and process as you just explained?
21	MR. CURRIER: Yes, we would certainly

1	like to that NOSB discussion to kind of inform our
2	thinking about, you know, our review approach.
3	Ultimately, you know, whatever's published in the
4	regulation is what we're basing our standards off
5	of.
6	MEMBER NANDWANI: Thank you. This is
7	helpful, I appreciate that.
8	MR. CURRIER: Absolutely.
9	CHAIR POWELL-PALM: Thank you again,
10	Doug.
11	MR. CURRIER: Absolutely. Thanks.
12	CHAIR POWELL-PALM: Moving on, we'll
13	have Malaika Elias, followed by Heather Spalding,
14	and then Oren Holle.
15	MS. ELIAS: Can you hear me?
16	CHAIR POWELL-PALM: Yes.
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18	MS. ELIAS: Hi. My name is Malaika
19	Elias. I'm a food and technology campaigner,
20	Friends of the Earth. I just want to say thank
21	you for the opportunity to provide comment or

1	materials subcommittee proposal on excluded
2	methods. Friends of the Earth supports
3	recommendations at National Organic Coalition, not
4	seen to improve its resource, excuse me, to improve
5	its response NOSB recommendations. In addition,
6	Friends of the Earth would like to strongly urge
7	the materials subcommittee to include a few more
8	techniques to the excluded methods list. Cell
9	fusion and protoplast fusion, and that these
10	techniques be defined in reference to the in vitro
11	nucleic acid techniques. We really wanted to
12	ensure that we have an organics certification which
13	truly addresses emerging biotechnologies and new
14	techniques being applied to agriculture. In
15	November of 2016 the NOSB voted unanimously to
16	update U.S. organic standards to exclude
17	ingredients derived from the next generation of
18	genetic engineering and gene editing. As the NOSE
19	has established, these new genetic engineering
20	techniques are incompatible with organic and
21	sustainable agriculture. Currently the list of

1	techniques that are excluded, methods is
2	incomplete and currently NOSB's excluded methods
3	list makes reference to recombinant DNA
4	technologies, and it should be updated to use in
5	vitro nucleic acid technologies, which is
6	consistent with NOSB's other definitions used to
7	determine excluded methods and includes more
8	specific techniques such as RNA and recombinant
9	DNA. So in conclusion, Friends of the Earth
10	supports the improvements of updates to the Organic
11	Standards which will help preserve the integrity
12	of organic classification. And we strongly urge
13	the NOSB to continue to exclude new gene editing
14	and synthetic biology techniques from organic by
15	updating the list of excluded techniques to include
16	the additional genetic engineering techniques.
17	Thank you.
18	CHAIR POWELL-PALM: Thank you very
19	much for your comments today. Any questions from
20	the Board?
21	CHAIR POWELL-PALM: All right. Thank

you so much again. Moving along, we'll next have 1 Heather Spalding, followed by Oren Holle, and then 3 Marie Burcham. So Heather, please go ahead. SPALDING: Thank you so much. 4 MS. Good afternoon. 5 I'm Heather Spalding, deputy 6 director of the Maine Organic Farmers and Gardeners We're 7 Association, MOFGA. broad-based а community and we're working to create a food system 8 9 that's healthy and fair for all. We started certifying in 1972 with 27 farms and we now certify 10 11 more than 500 farms and processing facilities that 12 presenting approximately 65,000 acres of farmland. And we're also a member of the National Organic 1.3 Coalition, NOC. submitted more detailed 14 We written comments as has NOC. But today I just 15 wanted to talk about two things. 16 First, I wanted to thank the crop 17 18 subcommittee for the great work on the ammonia extracts petition and as you heard from our crop 19 specialist, Caleb Goossen, who spoke a little 20 earlier, we strongly support the proposal to 2.1

1	restrict the use of highly soluble nitrogen
2	fertilizers. The mantra feed the soil, not the
3	plant guides our work and we must be vigilant in
4	protecting the foundational principles of organic
5	farming as more and more natural sources of high
6	nitrogen fertilizers could allow farmers to
7	sidestep the basic requirements set out in section
8	205-203 of the NOP Standards. The carbon to
9	nitrogen ratio is clear and addresses the issues
10	well and certifiers can enforce it with ease. Our
11	certification staff members indicate that the math
12	is manageable, that Co-op Extension has
13	recommended values for crop nitrogen needs and all
14	fertilizer manufacturers can easily supply MROs
15	with an analysis that includes the carbon to
16	nitrogen ratio. And so with a simple guidance
17	document from the NOP certifiers could easily
18	verify the restrictions. When we've done this,
19	a similar verification for Chilean nitrate in the
20	NOP Standards. And we do acknowledge that this
21	would create some additional work for certifiers,

but we feel that we should be happy to accept that additional effort in order to protect organic

The second thing I wanted to highlight 4 escalating farmland 5 is the problem of 6 contamination from sludge containing per polyfluoro substances, PFOS. This isn't on your 7 workload, but I just really wanted to be sure 8 9 everyone is aware of what's happening up here in Farmers are facing the loss of their 10 Maine. 11 farmland, their products, their businesses, and 12 sometimes great uncertainty about their health because of extensive contamination from PFOS. 13 You've probably heard a lot about it. 14 15 sort of in the spot light right now with farmland contamination and efforts that the state is taking 16 17 to address it. We just this week, the legislature 18 has passed a ban on spreading sludge. And also 19 is sunsetting pesticides that contain them . Ι 20 know my time is up, but I wanted to just post in the chat a link to an upcoming webinar because I 2.1

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principles.

1	noticed this is coming to a neighborhood near you
2	soon. And I think people will really want to know
3	about this and I hope the NOSB will call for
4	coordinated and aggressive action to deal with PFOS
5	at the federal level. So thank you so much.
6	CHAIR POWELL-PALM: Thank you so much
7	for your comments. Yes, that's huge. And I
8	really appreciate you bringing that to our
9	attention today. Any questions from the Board?
10	Brian, please go ahead.
11	MEMBER CALDWELL: Yes. Thanks,
12	Heather and this PFOS things is definitely a big
13	deal. I'm just really quickly, are there issues
14	with accuracy and testing at the parts per billion
15	or parts per trillion level, with PFOS, has that
16	come up or is that sort of well understood?
17	MS. SPALDING: I can't answer that
18	question. I do know that, you know, just that it
19	is so toxic at the parts per billion, parts per
20	trillion level is calling much more attention to
21	this. There is, I guess you would say lowering

1 .	levels of screening levels and threshold levels
2	that are being recommended for contamination all
3	the time. So Maine has set some very strict levels
4	of maximum contamination levels of water. And
5	very much stricter than EPA. But as more and more
6	information is coming to light, the
7	recommendations are that we should probably be
8	lowering them even further. So I don't know the
9	specifics about how difficult or how much integrity
10	there is, I guess if that's what you're asking about
11	the put the practices for detecting these, but
12	that's there's just needs to be so much more
13	research, so many more public resources available
14	to set thresholds for, you know, how PFOS moves
15	through the soil and the water, how it's taken up
16	in all different crops, where it is in the different
17	parts of crops. Yes, there's just a huge need for
18	this. And, you know, we've been kind of making
19	it up as we go along in Maine, but we know that
20	there that federal action is really what we need.
21	MEMBER CALDWELL: Great. Thank you.

1 MS. SPALDING: Thank you.

2 CHAIR POWELL-PALM: Any other 3 auestions from the Board? I'd be really interested to hear if you have any more specific 4 requests from work that the Board could request 5 6 to get into work agenda or work, just as, you know, 7 the leadership voice of the community that we can be doing on this issue of PFOS contamination? 8 9 MS. SPALDING: I do. I have -- we're actually developing sort of a work plan for various 10 11 agencies in the federal government. So we've been 12 reaching out to our congressional delegation, Maine's congressional delegation. 13 All of the members have submitted a letter to Secretary 14 15 Vilsack calling for certain things that can be done 16 with USDA. And I would be happy to share that 17 document with you if you haven't seen that. 18 also advocating for action, you know, at FDA, at 19 EPA, at, you know, there are many different federal 20 agencies that can be doing a lot to address the problem of PFOS. I could -- I know you're like 2.1

really stressed for -- stretched for time, but I 1 could -- what could I do? 2 3 CHAIR POWELL-PALM: We could happily follow up. I just want to put that out. 4 I think this is something that is very needing of our 5 So thank you for your -- bringing it 6 attention. 7 today. 8 MS. SPALDING: Yes. I appreciate 9 that, too. And I quess, you know, the key things that we really are feeling are so difficult, are 10 11 just like awareness for farmers about when it's 12 safe or when it's no longer safe to even be farming their land because there are several farmers in 13 Maine who basically have had to just pull all their 14 15 products from the market. They're waiting, they're uncertain, their body burden levels are 16 17 higher than factory workers at a DuPont plant. 18 You know, their children's body burden levels are 19 extremely high too and we just don't have the data 20 to show like what is an acceptable level, what is a permissible level of PFOS contamination in 2.1

1	various different crops. So we really need that.
2	CHAIR POWELL-PALM: Okay. Well,
3	please stay in touch. Yes.
4	MS. SPALDING: Thank you.
5	CHAIR POWELL-PALM: This is important
6	and thank you for bringing it today. Next up, we
7	have Oren Holle, followed by Marie Burcham, and
8	then Bryce Irlbeck. So Oren, if you're there,
9	please go ahead.
10	MR. HOLLE: Yes, I'm with you at this
11	point.
12	CHAIR POWELL-PALM: All right. The
13	floor is yours.
14	MR. HOLLE: You can hear me okay?
15	CHAIR POWELL-PALM: We can, yes.
16	MR. HOLLE: Okay. I'm Oren Holle.
17	I'm an organic grain producer in Kansas, I'm
18	president of the Organic Farmers Agency For
19	Relationship Marketing, better known as OFARM.
20	We appreciate the opportunity to address the
21	members with the NOSB. We especially want to thank

1	you for the opportunity for virtual participation.
2	OFARM in a nutshell coordinates marketing
3	programs with producer co-operative marketing
4	groups. My comments today will be of a general
5	nature and we want a first of all commend the
6	National Organic Standards Board for their
7	commitment to the task keeping the Organic Program
8	strong and to advocate for the needs of the organic
9	operations. Finding individuals, particularly
10	producers who are running to serve in that capacity
11	is a challenge. As we search for candidates, our
12	occasions in the past for volunteers to serve,
13	comments have been made to more adequately,
14	enumerate those who accept that obligation. While
15	we don't want these positions to become
16	career-enhancing opportunities, it seems logical
17	that the NOSB could convene a session with current
18	and past NOSB members to assess an established
19	protocol for reimbursement for actual expenses
20	incurred while they need to take the time away from
21	their obligations to their current roles in

1 organic.

The Board is also to be commended for
keeping the pressure on to finally bring the origin
of livestock road to fruition. The apparent
multi-year time lag and this process points to a
more fundamental issue. There's obviously still
a disconnect in the basic relationship between the
NOSB and the NOP. Issues are addressed, some rules
are proposed, and it just gets tabled in a
bureaucratic process. Maybe it's time for the
NOSB to convene a sit-down with the NOP and the
AG secretary to re-establish the purpose of the
NOSB to properly interpret the basics of the
Organic Foods Production Act. From a common sense
perspective, it seems that many of the issues that
have gone and may in the future gone to rule making
could be solved if we just get back to the basics
of proper interpretation of the Organic Foods
Production Act. As we understand it, the idea is
the fundamental purpose of the NOSB. Considering

1 the debate on the limitations of synthetic
2 nitrogens, here's how it plays out in a real-world
3 of transition to organic grain production. The
4 larger the operation, the more incentive there is
5 to follow the mantra of using all farm inputs to
6 enhance production outcomes. Relaxing any
7 processes to increase the usage of questionable
8 inputs results in a slippery slope that enhances
9 the model of production that non organic has
10 followed way too long. The very existence of the
capo-type operations in organic bears witness to
the way organic principles can be bent to fit their
production model. Corporate and sometimes large
private interest continuously promote transition
of large-scale production units which are the most
16 likely to pursue the shortcuts to basic
soil-building principals by using more all farm
inputs including questionable nitrogen sources.
19 Is my time up already?
20 CHAIR POWELL-PALM: It is. I'll ask
you a question to just finish. If you if you can

1 finish quickly.

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MR. HOLLE: I would just add one final 2 3 thought, the strengthening of the organic enforcement rule must be implemented sooner rather 4 than later. We appreciate the opportunities for 5 6 input to that rule of development process, and its 7 benefits are already apparent. We ask the NOSB to once again, keep up the pressure to bring this 8 9 rule to fruition.

> CHAIR POWELL-PALM: Thank you. Thank you for your comments today. Do we have any questions from the board for Oren? I have a question for you, Oren. As we look to the growth of the industry, I asked the question yesterday, you know, how do we grow the industry to 50 percent of food in America. But In looking at how organic has been an exceptional example of a grassroots growth with a lot of small farmers, a lot of all size farmers engaging in the certification and building this industry. I hear your concerns about larger operations getting into organic.

What would you say is the key to getting more smaller operations? All sizes of the farmers to see organic as a viable path for themselves and to enhance the transition and increase the transition of farmers to organic?

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Well, if you're asking MR. HOLLE: specifically about, you know, the area that I'm familiar with and that would be among the grain farmers. You know, we see them transitioning in and out. And much of that have been due to, you know, the fluctuations in the market potential. You know, we see organic prices dropping and they're gone back to conventional again. you know, organic having from great opportunity like they're all right now, the transition within someone floor because the conventional markets are pretty well established too right now. But I think the basic premises is that one of the questions is there, okay. We're looking forward to the opportunity of the organic premiums and all the

1	economic revenue that can be generated in the
2	transition. But they're just not sure that it has
3	any longevity as if there were, you know, some
4	degree of assurance that there would be a
5	stabilizing in that market process that would be
6	a big asset. In addition to that, I would say that
7	in the long-term, it's still a matter of education,
8	particularly right now with a high cost of the
9	inputs particularly and all the fertilizers. And
10	of course, chemicals had gone sky high too.
11	They're certainly, you know, a number of them are
12	looking that direction. But there again, you
13	know, if the economics are there and there's some
14	reasonable assurance that's going to be set
15	stability, you know, that certainly would help
16	because most of them are still going to have to
17	sit down with their banker and convince them that
18	the transition is going to be, you know, a viable
19	alternative. Does that answer your question?
20	CHAIR POWELL-PALM: I think so, yes.
21	Thank you very much. I appreciate your time today

and your comments. All right. Next up, we have

Marie Burcham, followed by Bryce Irlbeck, and then

Justin Raikes.

4 MS. BURCHAM: Can you hear me okay?

5 CHAIR POWELL-PALM: We can. Yes,

6 please go ahead.

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All right. Thank you. MS. BURCHAM: Good afternoon, members of NOSB and NOP, and my name is Marie Burcham, and I am the policy director The Cornucopia Institute. Our planet is experiencing extreme stress due to climate change, potentially climate disaster t.hat. will fundamentally alter how we relate to Some of this change is caused by the environment. Despite this reality, the USDA seems wav we farm. bent on staying the course with their general support of chemically intensive farming. The NOSB has asked other commenters what it would take to increase organic share of the market to 50 percent or above. What it would take is broad recognition that commercial agriculture, as we know it, is a failure on all counts. It is more expensive, more dangerous. less socially beneficial, nutritious and favorable food is produced. growing body of scientific research shows that farm assistance designed or managed according agroecological principles can meet food needs of our society while also addressing other serious To expand our back marketplace, we need concerns. to improve integrity and transparency throughout the agricultural system. The whole organic system must connect to continuous improvement, and we need an organic label to stand for true conservation agriculture as an example for how all farming should be. The organic marketplace has to solve

The organic marketplace has to solve its existing problems and strive to do better for tomorrow. Of particular concern are issues of consistency, role improvements, and transparency information. For example, a certifier survey on policies for a three-year transition case shows

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1	serious inconsistencies. These inconsistencies
2	encouraged bad actors to cheat the system, pushing
3	industry as a whole away from the goal of continuous
4	improvement. We support technical assistance for
5	NOSB knowing these volunteer roles are heavy lift.
6	Part of that technical support should include
7	expertise and guidance on most recent research,
8	including that presented by public commenters.
9	Additionally, we recognize that the NOSB cannot
10	consider economics and evaluating substances,
11	however the NOP should not let economic factors
12	drive decision-making when there are concerns of
13	environmental or human health. Focusing on
14	staying true to principles of conservation
15	agriculture and maintaining continuous
16	improvement is critical to help the organic
17	marketplace grow.
18	Finally, we are very concerned about
19	the additions to the PPM that may have the effect
20	of limiting free speech in a federal public forum.
21	The first to personal tax is subjective.

1 Sometimes comments that are subjective might 2 impugn the character are factual, and free speech 3 protects these kinds of remarks. There are real questions about whether the NOSB can restrict 4 commenters in this manner and we would like to see 5 6 the USDA's attorneys address these concerns as soon 7 as possible. Thank you very much and welcome to I hope your time serving on the 8 the new members. 9 Board is productive and helpful. Thank you for your 10 CHAIR POWELL-PALM: 11 Any questions from the Board? comments. 12 as a -- if I were an organic consumer, what would 13 you say to me as the reason that I should buy organic What is going well in our industry? 14 15 MS. BURCHAM: There's a lot going well, I believe. The research that's going on right now 16 17 is really showing that organic food is -- will lower 18 the dietary risk of exposure to pesticides. Ιt also is showing that practices that are common in 19 20 organic agriculture, such as cover cropping and crop rotation and things like that, are increasing, 2.1

not just the carbon sequestration, but resilience
of the food system. So these farms are producing
the same if not better yields in times of climate
stress. And I think especially with the pandemic,
consumers are more aware than ever how fragile our
food systems are. So that is an important piece
as well. And these same practices that are
beneficial for climate health are also showing to
increase, especially in micronutrients in food.
There's a lot of interesting research and data
collection going on surrounding that. And from
the Bionutrient Research Institute, I'm really
looking for it to them publishing more of that going
forward. So I think organic food really is the
answer, not just for the consumer who can afford
it, but really for transforming our entire food
system and being an example, moving forward and
it obviously takes a lot of consumer education and
there's a lot of anti-organic propaganda out there
as well that we need to fight against continuously
as a movement. But as time goes on, the research

1	just gets better and there's so much more we can
2	speak to that is really amazing and really
3	recommends what we're doing here to the rest of
4	the world and to consumers too.
5	CHAIR POWELL-PALM: Thank you so much
6	for those comments. I appreciate your time today.
7	MS. BURCHAM: Yes. Thank you.
8	CHAIR POWELL-PALM: Next up, we have
9	Bryce Irlbeck, followed by Justin Raikes, and then
10	Kris Klokkenga. And Steve Ela always did a great
11	job reminding folks that I the chair will be
12	an equal opportunity butcher of names. So I have
13	not said that, but I do apologize if I've gotten
14	your name wrong. Bryce, please go ahead.
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16	MR. IRLBECK: Yes. Thank you. First
17	I want to thank the Board, I know how much volunteer
18	time you've put in and so, I thank you for that
19	and all that you do. And so my name is Bryce
20	Irlbeck, I am a fairly large organic farmer in
21	West-central Iowa. I do consulting on about

1	80,000 acres of organic throughout the U.S. And
2	so I want to talk about two things today. The first
3	is the highly soluble ammonium nitrogen product,
4	and then the import markets and the organic
5	certification standards and how we see we can
6	improve them. And I wasn't planning on talking
7	about the soluble nitrogen product, but I saw
8	comments from a representative in my state, and
9	I thought it very, very important to make sure in
10	my feelings that I was never more clear that people
11	represented us not in fact don't actually represent
12	us. I want to let you know that I highly support
13	your position at the Board and that contrary to
14	what was said in the comments for me as a farmer
15	it does not provide organic benefits specifically
16	in our state, a lot of these products are being
17	shipped out of the state, and significantly
18	increasing our cost of production, by taking those
19	products off the market and allowing big ag
20	businesses to corner the vital nutrient market that
21	we have to grow and expand and be fruitful and

organic. And I'll bring an example of this. 1 keep it short, but the prohibition of this nitrogen 2 3 from the words of this comment was limit access to affordable fertilizer for organic farmers and 4 reduce production of organic products and that 5 couldn't be more opposite on my farm, if you'd come 6 out here, I can show you real life how that is the 7 opposite. Right now, we can't get enough chicken 8 9 It's being hoarded. It's not available manure. It's being kept by some of these large 10 to us. 11 companies. And it's been a very difficult year 12 on that, so I can show you personally on my own Now, enough of that. 13 farm. I thought it was important to bring that to the Board's attention 14 15 to talk through it from an organic farmer's point of view actually in Iowa. 16 17 Now let's go to the import markets. 18 I think one of the things that I've heard in the 19 last couple talks that resonating. How do you 20 increase organic production? And I think one of the things that I see in organic farms as the 2.1

1	volatility of organic and it's created through
2	imports that we bring in at cheaper prices and
3	production. And you could argue back-and-forth
4	that they're organic or not. We all have our views
5	and I think you have a good idea of what they are.
6	But during the low periods it forces farmers out
7	because they import lower priced grain. Right now
8	we're in a good period of organic production
9	because we have higher grain than needs to be for
10	the end-users meaning that the dairies, the food
11	companies. We have \$40, 45 soy beans. You know,
12	it's great for me, but I know the bottom side of
13	this is going to be very painful and it's very
14	painful for those injuries right now. If we could
15	find an equilibrium in the middle by bringing in
16	more viable rules to make sure that we do have
17	organic integrity and stabilize the market. I
18	think it's one of the biggest things to increase
19	the production of organic. And we could do that
20	through a few aspects of adding acres to the organic
21	certificate and centralizing crop sales so we

what is available on each farm. It'd have 1 a 2022 database with that kind of information and 3 technology we have. CHAIR POWELL-PALM: Thank you very 4 5 much for all of those comments, that was a lot, 6 so thank you so much. Brian has a question for 7 you. MEMBER CALDWELL: So I just want to let 8 9 you we're running out of time there and I just 10 wondered if there were any vital other comments 11 that you wanted to make. 12 MR. IRLBECK: Yes. So along with the imports coming in and out of fluctuating the market 13 so much that we don't ever create a sustainable 14 15 import environments. We also а lot insignificant grains. That seem insignificant if 16 you look at face value, the wheat, the barley, the 17 18 small grains that really make rotations grow on 19 the farm to be successful in organic, at least in 20 the Midwest, are not viable in our region. So you'll see a lot of farmers just corn, soy beans, 2.1

1 corn, soy beans, which is not a viable long-term because they can't 2 rotation financially 3 sustainably fit the small grains in if we import them. 4 5 CHAIR POWELL-PALM: Amy, please go 6 ahead. 7 MEMBER BRUCH: Yes. Bryce, just a quick question. Thanks for your time today. 8 Ιt 9 sounds like you work with a lot of transitioning farmers and organic farmers in general. 10 What 11 would you say are the top three barriers to 12 expanding organic production? MR. IRLBECK: Yes, so I think the top 13 one's instability. I mean, it looks really good 14 15 right now. But when it drives back down to \$6, 7 corn, it's really hard to compete. So finding 16 17 that stability and then the education part of it, 18 of understanding the certification process and 19 really getting it so it's one process, not 100 20 different processes each make their own kind of rules. Doesn't have to be exactly the same, but 2.1

keeping that across the board at the same and then 1 The second one, the certification kind 2 education. 3 of lining that out a little better than it is today where each one makes their own rules, per se in 4 the fast lane. 5 MEMBER BRUCH: 6 Thanks. 7 CHAIR POWELL-PALM: other Anv questions from the Board? I have a quick question 8 9 In looking at this kind of for you, Bryce. whiplash market that we're seeing where we have 10 Do you have 11 really high prices, really low crops. 12 any take on farmers trying to organize in a way that stabilizes the supply chains. 13 We've heard it from two of the folks from OFARM, which is a 14 15 group of co-operative marketing organizations.

stabilize this to help it grow? So that the end buyers have a consistent supply. So that farmers can realize a consistent price and we get away from these extremes.

Your take on co-ops, your take on how do we

21 MR. IRLBECK: Yes. You know, for me,

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co-ops are hard. I always believed if you can get 1 two farmers to agree, you can rule the world. 2 No 3 two farmers agree usually in most circumstances. So I think it really comes down to the presentation 4 or the talk that I had is it's really enforcing 5 6 the integrity of organic because the production 7 that was coming across is, well, previous three years at \$4 or 5 or 6 and we see these people pop 8 9 up when countries shut down, the other country pops It's just very hard to 10 up and comes organic. 11 believe that's organic and they're producing under 12 the same standards, the same living, the same type of stuff that we're doing in the U.S. that you saw 1.3 a lot of people drop out. So I think it's really 14 standardizing the rules, figure out how to get that 15 sustainability. 16 CHAIR POWELL-PALM: I appreciate that. 17 I've asked this question to some other farmers, 18 but I'm always interested. 19 What is your crop rotation and how do you feed the soil? 20 And do vou try to grow the most profitable crop every year 2.1

1 on all acres?

Yes. So I am different 2 MR. IRLBECK: 3 than most organic farmers. Our crop rotation is three to four years of alfalfa, one year of corn. 4 It's -- so we're growing 50 to 75 percent of our 5 6 nitrogen through those three years, and taking up a vast majority of our weed control. Now this is 7 not the most profitable rotation if you put it in 8 9 itself, but with the data and what we're seeing flow in through our system, long-term, it is the 10 11 most profitable rotation. If you've taken all the 12 external factors of failures and successes, that 13 go on corn, soy bean and those type of rotations, 14 and input costs and labor and equipment and all 15 that type of stuff. We've settled and I've tried every rotation I think under the sun, 34 years of 16 17 alfalfa growing and nitrogen to take care of our 18 weeds and one year of corn, we might do a little 19 bean here and there, but not much, we're just kind 20 of figuring them out now, so --2.1 CHAIR POWELL-PALM: Okay. Thank you

Kim, please go ahead. so much. 2 MEMBER HUSEMAN: And I'll be quick. 3 Bryce, thank you so much for your comments I'm just curious. I know we look at 4 today. different ways to try to understand the market 5 6 dynamics from a pricing structure. But does any of your farming practices utilize any of the 7 conventional pricing mechanisms in order to find 8 9 price discovery for your organic grains? TRIBECK: You !]] 10 MR. and 11 specifically greens, no. It's a true markets. 12 call up and they bid what I'm willing to accept. So it's one of those true markets that doesn't 13 have the outside influences. I think the better 14 15 thing is the influence do -- to be fair I do have some connections to the conventional market, but 16 the grain prices, I think have more to higher 17 18 convectional grain prices more people jump out of 19 organic when we see higher organic prices less 20 people around the world want to for lack of better word, fake organic in those other countries because 2.1

1	if they're selling \$7 conventional corn, why do
2	it for \$10 and go through the whole process.
3	MEMBER HUSEMAN: Thank you.
4	CHAIR POWELL-PALM: Thank you so much,
5	Bryce. Always appreciate hearing from you and
6	getting that crop farmer perspective. So thanks
7	for taking the time today.
8	MR. IRLBECK: Thank you, everyone.
9	CHAIR POWELL-PALM: Next up, we have
L 0	Justin Raikes, followed by Kris Klokkenga, and then
L1	Lori Stern. So Justin, if you're on, please go
L2	ahead.
L3	
L 4	MR. RAIKES: Yes. Thank you. I'm a
L 5	fifth generation farmer from Easter Nebraska,
L 6	we've been in the same spots since about 1900.
L7	We raise grains, organic grains and forages and
L 8	are continuing to transition our land base towards
L 9	organic. We also raise and sell our own American
20	Wagyu beef and are trying to grow and continue to
21	sell our cover crops, specifically in organic

1	space. And, you know, organic is what allowed me
2	to come back into the operations. So thank you
3	to the Board members. As Bryce said and I know,
4	it's a lot of work, but appreciate what you guys
5	are doing because it is creating real opportunity.
6	So I wanted to add two comments to his. I agree
7	with everything he said, and just in addition, with
8	respect to integrity, both domestic and imported.
9	You know, one of the things I want to point out
10	is one of the benefits of organic system is the
11	ability to offer, you know, really good paying
12	benefits to our entire team. We strive to do that
13	and create new opportunities to find new ways to
14	increase paid benefits. A big concern of ours
15	going forward is we consider this integrity
16	question is whether we're competing on a level
17	playing field. And with respect to wages, health
18	and safety standards and you know, that's
19	particularly to imports, but it also kind of plays
20	into fraudulent domestic production as well,
21	because obviously somebody is just committing

fraud domestically doesn't have the same incentives that we do. So we're trying to build this, not just for ourselves, but for our entire team and our entire community in the long run and then, you know, it's great that we have the opportunity to do that, and we are very interested in the integrity issue just to, you know, continue to allow that to occur.

The second thing I wanted to point out with respect to this issue is what we've noticed of end-users particularly on the part are merchandisers and market makers. real reluctance or unwillingness to challenge the validity of whether it's less than robust imports or whether it's suspect domestic. The market incentives just don't seem to be there for the end-users to really look hard at where stuff is coming from. So and I punctuate that with a direct quote, I will not include attribution on the quote, but a notable organic end-user has made the comment that they would rather pay growers in India, you

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1	know, \$1 to 2 dollars a bushel for this particular
2	product that's worth quite a bit more here than
3	the deal with farmers domestically in the United
4	States. And so that's the attitude that's out
5	there. And that's why we really encourage the
6	Board to pursue true parity standards and increase
7	enforcement. Thank you.
8	CHAIR POWELL-PALM: Thank you very
9	much for your comments today. Any questions from
10	the board for Justin? Yes. Logan has one.
11	MEMBER PETREY: Hi. It's not a
12	question, but, Justin, it's been many years, but
13	it's good to see you, from the old Generation Farms
14	group, but anyways glad you're into organics,
15	that's awesome. Justin definitely helped my
16	operation get into organic so much appreciation
17	there. But anyway, good luck with everything.
18	MR. RAIKES: Thanks, Logan.
19	CHAIR POWELL-PALM: Thank you, Logan.
20	Amy, please go ahead.
21	MEMBER BRUCH: Yes. Justin, thanks

1	for your time today. Fellow Nebraskan, I really
2	appreciate your participation here and sharing
3	insight on your operation, on our work agenda for
4	that TACS committee is just proposing to have acres
5	on certificates to begin that more
6	transparent-type conversation that growers,
7	inspectors, certifiers, and those end-users car
8	start having. What are your thoughts with that
9	piece? Do you think that will be helpful and do
10	you think it would cause any undue burdens?
11	MR. RAIKES: Fully support. Hard for
12	me to think of a downside. You know, I'm sure that
13	we could get tripped up on something silly, but
14	in general, I think it's got to be the right
15	direction.
16	CHAIR POWELL-PALM: Thank you for that
17	question, Amy. Thank you, Justin, for your
18	comments today. One quick question for you,
19	Justin, that I had is, when you're thinking about
20	growing organic, you talked a lot about your
21	the viability of your business, being quite good,

you're able to offer a bright spot in your community as far as a viable business. What can the Board do and how do we help farmers like you realize more opportunities? How do we grow this thing that is so valuable? And one sort of other question to that is, when we look at resiliency in American agriculture, do you see organic as a more resilient system? And do you see it as something that is the future of your community?

MR. RAIKES: Big questions. First I agree with Bryce's comments that I think the integrity piece is a big deal, the ability to grow small grains, the ability to mix up rotation, you know, in our neck of the woods is a deal because, you know, we might see more people coming in if there were more options, you know, corn, soy beans in this part of the world's what people know. But, you know, having more flexibility and rotation is a big deal. That's one of the reasons why, you know, we're interest in trying to continue to grow and increase the cover crop seed base because

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1	that's, you know, that's an end-user market. But
2	I think our biggest interest is trying to see, you
3	know, more end-users come in. So we want to see
4	more visible end-users in more geographies as well.
5	We have that's a big wall and the integrity stuff
6	that we talked about, you know, that helps. But
7	I think people see it at the grocery store, they
8	see the end-users that have connection to the
9	products and where it's going. That's all
10	positive in that house. I'm sorry, I forgot your
11	second question.
12	CHAIR POWELL-PALM: Oh, just when we
13	look at resiliency in real communities, what do
14	you see as the relationship between building a
15	resilient role in America in organics?
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17	MR. RAIKES: 100 percent. You know,
18	I do completely agree. In fact I recently got in
19	an argument with university extension folks close
20	to me because I don't I don't feel like university
21	support is very good for what we're trying to do.

1	And my points of them is look, I needed, you know,
2	good candidates. I need the pipeline of kids
3	coming out of universities that, that we can train
4	in because we have so many bolt-on opportunities
5	to what we're doing that we can't pursue or it
6	doesn't make sense for us to pursue. There's so
7	many other things that you can plug into the system,
8	from a soil all standpoint for rotation standpoint
9	from wherever else, whether that's running, you
10	know, groups of chickens in parallel for bug
11	control or bolt on grazing opportunities for other
12	businesses. There's a lot of other things we can
13	do. And you know, fundamentally that's creating
14	jobs. It's bringing exactly what we were talking
15	about earlier. You know, we're trying to create
16	good opportunities for people and, you know,
17	fortunately, so far, we've been able to do that.
18	We want to continue that runway. So we don't
19	we can't manage effectively, every single
20	opportunity that might come our way. And it's
21	disappointing to see them have to kind of sail away

1	because you can't go after them. We don't have
2	enough people or we don't have enough people just
3	to plug into our operation even if they're not
4	working for us in some way that they can bolt on
5	and go. So 100 percent, I'm all the way on that.
6	CHAIR POWELL-PALM: All right.
7	Opportunities sound bound list. So appreciate
8	that. We need to add some fuel to this fire.
9	Thank you for your time today and your comments.
LO	New up we've got Kris Klokkenga, and apologies
L1	if I'm saying that wrong. So Chris, please go
12	ahead.
13	MS. ARSENAULT: Don't think Kris is
L 4	with us. I haven't
L5	CHAIR POWELL-PALM: All right moving
L 6	on then to Lori Stern. Lori, please go ahead.
L7	MS. STERN: All right. I'm here
L8	somewhere.
L 9	CHAIR POWELL-PALM: All right. Thank
20	you.
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1	MS. STERN: So thank you for the
2	opportunity to speak. I'm Lori Stern, Executive
3	Director at the Midwest Organic & Sustainable
4	Education Service, also known as MOSES. Like
5	other speakers, I would like to send my
6	appreciation for all of the members of the NOSE
7	especially the farmer members and in particular
8	new member Liz Graznak, who was our 2020 farmer
9	of the year. So again, congratulations to Liz.
10	I want to use my time today to speak generally
11	about the organic program and farmer access to a
12	certification program with integrity. From
13	previous comments, I know we are all committed to
14	increasing organic products. However, the goals
15	of organic or more than success in the marketplace.
16	Organic is a system that relies on diversity to
17	build healthy soils and vibrant communities.
18	There are farmers who face barriers to
19	certification, but live the values and intent of
20	true organic. For these farmers and other small,
21	medium-size farmers already certified it is

1	important to reduce the cost of certification.
2	Ideally for smaller operations, we proposed that
3	these costs would be covered 100 percent. We are
4	grateful that the cashier program mistake was
5	corrected. However it is still inadequate for
6	operations that gross less than \$250,000 a year.
7	Moving to this approach would minimize paperwork,
8	additional applications, and make the support
9	automatic and accessible. Another way to improve
10	access to certification is to promote group
11	certification as an option. Several incubated
12	farms in the Midwest have utilized this approach,
13	the ability for a collective of farmers who share
14	a label, farmland, or unique farming methods, to
15	also share the burden of documentation, makes the
16	certification process less daunting and
17	threatening. We see younger farmers and black,
18	indigenous, and other farmers of color embracing
19	cooperatives and collectives as a way to gain land
20	access and farm life balance. Good certification
21	would validate this approach and increased

Τ	participation in the National Organic Program for
2	a new group of farmers. It feels very much like
3	the organic movement is at crossroads. We urge
4	the NOSB to keep small to medium scale organic
5	farmers in mind as requests come for changes that
6	favor those that view the label on the in terms
7	of market share. Instead, let's work to make the
8	label more accessible to the farmers whose
9	operations more closely resemble what consumers
10	expect from organic: diverse, whole-system farming
11	that builds healthy soils and truly benefits
12	people, animals, and the climate.
13	CHAIR POWELL-PALM: Thank you so much
14	for your comments.
15	MS. STERN: Okay.
16	CHAIR POWELL-PALM: Do you have any
17	questions from the Board? I'll throw the same one
18	at you since you almost answered it for me. Could
19	you kind of dive in a little bit more? I feel like
20	we've heard a lot about, you know, organic not being
21	necessarily considered an obvious climate solution

Τ	and not acknowledged when large funding
2	opportunities come around as the climate smart
3	solution. And so when we're looking at that we're
4	only one percent of the land, what do you see as
5	the balance between elevating certain organic
6	farmers versus saying really anyone who's willing
7	to participate is so ahead of conventional farming,
8	that we should just be trying to add as much fuel
9	to this as we can to keep this growing. What's
10	the balance to strike there?
11	MS. STERN: It's a tough one for sure.
12	I think that ultimately we want to get to the place
13	where what we're not advocating for us to something
14	that's less bad.
15	CHAIR POWELL-PALM: Yes. Yes.
16	MS. STERN: And I think that, at the
17	end of the day, small farms still feed the majority
18	of the world. And, as we're and other speakers
19	have pointed out the fragility in our food system.
20	I think we do need to continue to do what we can
21	through USDA programs and the ways that we

1	approached us to really strengthen the ability of
2	people to access land and continue to kind of farm
3	at human scale. And yes, I mean, there's
4	definitely a balance to be had. And at the same
5	time, I think, just this notion of, you know,
6	building healthy soils and being truly
7	regenerative in the way that we are farming, is
8	where I mean, you mentioned climate at the front
9	end. And I think that's it's still going to
10	be the critical piece. It still where we want the
11	balance of this to happen, I believe.
12	CHAIR POWELL-PALM: Thank you. Liz
13	has a question for you.
14	MEMBER GRAZNAK: Hi, Lori.
15	MS. STERN: Hi, Liz.
16	MEMBER GRAZNAK: Being a small farmer
17	myself I'm very, very glad that you brought up this
18	topic and it was actually a conversation that was
19	happening in the chat earlier today and also a topic
20	of conversation earlier. So I think it is a real
21	concern how to keep and get more younger, newer,

1	smaller-scale farmers. I don't want to say to I
2	mean, they we are farming organically, but
3	having faith in the label and having faith in what
4	USDA NOP stands for is really, really important.
5	And I recognize that it is an issue, but I don't
6	know what the answer is. I don't know how to
7	approach the young farmers and the small-scale
8	farmers that are in my community to impress upon
9	them why they should certify and I think it is a
10	topic that people are talking about. But I just
11	want to know maybe from MOSES' perspective what
12	ideas you guys have or you're talking about of ways
13	to address the problem, I guess. It's a super hard
14	question.
15	MS. STERN: It is a really hard
16	question. And I think I touched on it a little
17	bit. I mean, if we look at I mean, group
18	certification is something that happens, but it's
19	not necessarily ubiquitous. It's not all
20	certifies that know how to do that
21	MEMBER GRAZNAK: Yes.

1	MS. STERN: or note that. So I
2	think that ultimately I guess we're starting with
3	this place of reducing the barriers. And true to
4	all USDA programs, but specifically in this
5	instance, it would be access to the National
6	Organic Program for sure. So reducing barriers
7	and then doing what we can to really promote
8	markets. I mean, a lot of these comments are
9	saying the same thing, right? So people know that
10	there's a place to sell into that they're, you know,
11	really looking at equity along entire food systems
12	and value chains. So that that happens. I mean,
13	the concern I guess with some of the largeness is
14	that where the profit ends up. But I think if we
15	can show value across supply chains, more local
16	food systems, reducing barriers to many of these
17	programs that make it impossible and then land
18	access things just tough, just generally. You
19	know, people that want to farm organically and we
20	could probably happily convince them to get
21	certified, may not have access to land. So just

1	trying to be really creative and now that happens
2	too.
3	CHAIR POWELL-PALM: Liz, thank you for
4	that question. That was great. And thank you for
5	your answer, Lori. Really appreciate your time
6	today and your comments.
7	MS. STERN: Yes. Thanks again for the
8	opportunity.
9	CHAIR POWELL-PALM: All right. Next
10	up, we have Mark Schonbeck, followed by Beatrice
11	Maingi, and then Doug Crabtree.
12	MS. ARSENAULT: Nate, I've not seen
13	Mark on the line with us.
14	CHAIR POWELL-PALM: All right.
15	Scooting right along then we'll have Beatrice
16	Maingi, Doug Crabtree, and then Nate Lewis. So
17	Beatrice, please go ahead.
18	MS. MAINGI: Can you hear me?
19	CHAIR POWELL-PALM: We can.
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1	MS. MAINGI: Okay. Thank you, Mr.
2	Chairman, on behalf of Safe Foods Corporation, I'd
3	like to thank the Board for reviewing the petition
4	to add CPC to the national list and for the
5	opportunity to provide comments. CPC's an FDA and
6	USDA approved intervention that has been
7	effectively used for over 15 years in conventional
8	poultry processing plants to reduce the prevalence
9	of pathogens. CPC is classified as a quaternary
10	ammonium compound or QAC. Most QACs are approved
11	by the EPA for use as sanitizers and algicides.
12	However, for over 60 years, CPC is the only QAC
13	approved by the FDA for use in oral applications,
14	such as toothpaste, lozenges, and mouth washes.
15	CPC cannot be compared to the EPA-approved
16	herbicides paraquat or diquat. These materials
17	are categorized as biologens which function as
18	highly reactive redox compounds, which CPC is not.
19	Therefore, it is chemically inaccurate and
20	misleading to equate CPC's function and toxicity
21	to that of paraquat and diquat. Although the

1	subcommittee's proposal states that CPC is not
2	essential for organic poultry processing due to
3	a robust organic poultry industry supported by
4	existing materials, data from the USDA's Food
5	Safety and Inspection Services or FSIS shows that
6	existing materials used in organic processing are
7	inadequate in addressing food-borne illnesses.
8	FSIS announced in 2021, a shift from measuring
9	poultry pathogens based on total salmonella
10	serotypes, to focusing on three serotypes that are
11	responsible for causing most human illnesses. FSI
12	has identified key performance indicator or KPI
13	reduction levels for those three strains. From
14	that data from June 2020 to July 2021, FSI's data
15	shows that 42.5 percent prevalence of the KPI
16	strains from all the establishments and then 100
17	percent prevalence came from organic on the
18	establishments, while 23.5 percent prevalence was
19	from establishments using CPC. Therefore
20	indicating that CPC would be a much needed tool
21	for organic-only establishments to control the

1	prevalence of these three key KPI strings. The
2	subcommittee commented that the rules are unclear
3	on how to handle an inert compound in a product.
4	In the case of CPC formulation, the inert
5	component is propylene glycol. So it would be safe
6	to suggest that the Board has encountered a similar
7	situation in the past with parasitic acid. PAA
8	formulations contain up to 50 percent acidic acid
9	which has no performance function. Again, Safe
10	Foods would like to thank the Board for reviewing
11	the petition and allowing for comments. Thank
12	you.
13	CHAIR POWELL-PALM: Thank you very
14	much for your time today and your comments. Any
15	questions from the Board for Beatrice? Mindee has
16	a question. Please go ahead, Mindee.
17	MEMBER JEFFERY: Yes. Thanks. Since
18	we have a little bit of time, do you mind if you
19	want to finish your statement on the comparison
20	to parasitic acid, did you get complete with that?
21	MS. MAINGI: Yes. So according to the

way parasitic acid is in its equilibrium, it has 1 the reactants as acidic acid and hydrogen peroxide. 2 3 But when you have your finished product, which is PAA, you also have acidic acid present in that 4 5 So it's always present, but it doesn't 6 actually serve a function. So you could say it's 7 an inert product that is already included in PAA. And for that, there doesn't seem to be any -- I 8 quess, any issue with having it listed as a -- on 9 the national list. For PAA to be listed even 10 11 though acidic acid is an inert part of it that is 12 not on the national list, if that makes sense. 13 MEMBER JEFFERY: Ts it. t.he same requirement because CPC requires the propylene 14 15 glycol, so you're saying it says it's the same and now the same? 16 It is because the raw 17 MS. MAINGI: 18 materials in order to produce PAA are the acidic 19 acid and hydrogen peroxide. However, when they're 20 reacted acidic acid does not fully react or it doesn't get out of the equation because it's an 2.1

1	equilibrium. So it's always going to be present
2	along with the product, PAA. But in this case,
3	it's just I mean, all right, it doesn't actually
4	perform any function. It doesn't kill bacteria,
5	it's just it's presence.
6	CHAIR POWELL-PALM: Any other
7	questions for Beatrice. Sanitizers, it's
8	something I always have on the top of my mind so
9	I really appreciate hearing from experts like you
10	and we appreciate your time today.
11	MS. MAINGI: Thank you for the
12	opportunity.
13	CHAIR POWELL-PALM: All right. Next
14	up we have Doug Crabtree, followed by Nate Lewis,
15	and then Ken Dallmier. Doug, are you I'm not
16	sure if you're joining my phone, but if you can
17	hear us, please go ahead.
18	MR. CRABTREE: Can you hear me?
19	CHAIR POWELL-PALM: Loud and clear.
20	Thank you.
21	MR. CRABTREE: That's great. I want

1	to apologize for any background noise. I'm in a
2	tractor and we farm up here in North Central Montana
3	and we're seeding today or trying to. I want to
4	first thank the Board for the opportunity to
5	testify and really honor your commitments being
6	there. I'd like to 2nd, or 3rd, or 15th of the
7	comments that other farmers have made about
8	scheduling these meetings at times when it would
9	be much more appropriate and convenient for
10	producers to be involved. But the issue I really
11	want to address primarily is the nitrogen
12	fertilizers. You know, we grow 15 to 20 crops
13	across 13,000 acres here and have been engaged in
14	organic agriculture for 20-plus years and worked
15	to get certifier and inspector. I've got a lot
16	of experience and I just I find these products
17	to be absolutely unnecessary and see many risks
18	in their inclusion. In our systems and those that
19	I'm familiar with across the vast part of country,
20	we rely on crop rotation. On what I called green
21	manure crops, essentially what I'm seeding today

Τ	coincidentally. We grow in our rotation a
2	five-year rotation, two of those are green manure
3	crops in our seven-year rotation. We'll have two
4	years devoted to that. Crops that are grown
5	strictly to build and feed the soil. And to my
6	understanding of the standards that is a
7	requirement. That's been moved everyone is they
8	purchased material or we'd have to go off farm to
9	get to the supplement our fertility. That's the
LO	view from here.
L1	CHAIR POWELL-PALM: Thank you so much,
L2	Doug. Oh, sorry. Go ahead. I didn't mean to cut
L3	you off.
L 4	MR. CRABTREE: No, I've said my piece
L 5	and would gladly address any questions.
L 6	CHAIR POWELL-PALM: Thank you. Any
L 7	questions from the Board? I have a question, Doug.
L 8	When you think about growing your system, you said
L 9	13,000 acres. It sounds like that's expansive.
20	There a lot going on there and there's a lot of
21	different crops being grown according to your

1 te	stimony, could you speak just a little bit more
2 ab	out how you view the relationship between the
3 fa	rmer and the land as far as feeding the land and
4 th	e land feeding the farmer, and how there's, maybe
5 a	missed piece. I think in some of these
6 di	scussions, but we're really looking at a holistic
7 sy	stem that can be self-sustaining. Could you
8 sp	eak a little bit more about the give and take
9 wi	th crop rotation and viable farming.
10	MR. CRABTREE: Well, I'll try to
11 ad	dress that, Nate, that's a big question. I
12 gu	ess, first of all I want to offer, you know, in
13 Mo:	ntana we're a very small farm. The normal or
14 no:	n-organic operations around us are two or three
15 ti	mes the scale that we are operated on. So I would
16 wa:	nt mention that.
17	CHAIR POWELL-PALM: Thank you for that
18 rei	minder. Yes.
19	MR. CRABTREE: Not to be deceived by
20 a	number that seems large in other parts of the
21 co	untry. But to address your question, you know,

1	we call our farm Vilicus and that's the Latin word
2	means steward of the land. We take that very
3	seriously. We believe that you know, it's not
4	only our ethics, but that that organic farming
5	is built upon. What we're really here for is to
6	be stewards, to build soil, to feed the biology,
7	and then as a byproduct of that, we will produce
8	some products that are able to be food for others.
9	But if we don't take care of the soil, we're not
10	organic at any definition and we're not going to
11	be here very long, that's critical. And the key
12	to that is look to nature as our guide, diversity
13	in any way you can get it. More crops, more types,
14	more seasons, integrate livestock, more species.
15	Under climate change that's just becoming more
16	and more evident and more and more necessary.
17	Spread your risk, diversify economically,
18	agronomically. That's what the key is.
19	CHAIR POWELL-PALM: Thank you so much
20	for that answer. Kim has a question for you.
21	MEMBER HUSEMAN: Hi, Doug. I really

appreciate your time especially being out on the tractor today. Being a larger-scope producer. 2

3 Can you speak to your challenges with sourcing seed

for your crop rotation and give us a little bit 4

5 more kind of, just dialogue from your perspective

6 in that arena?

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MR. CRABTREE: Sure. Well, if you would have asked me six months ago, I'd said we've never had any trouble finding seed. We do have some trouble farming commercially as organic. I think that's growing. We're trying to grow more and more of our own, which is the best way. biggest supply chain challenge we've faced is that there were actually some seeds we could not buy Oats, and soft wheat, that we have a this year. market for. So it has become a challenge. and I think that's transitory. But, you know, as I said earlier, I think the best thing we can do is grow our own or work with other producers in and cooperatively to region grow our organically on our own farms and then it can be

1	another market for us as well.
2	MEMBER HUSEMAN: Absolutely. Thank
3	you very much. I appreciate your response.
4	MR. CRABTREE: Thank you.
5	CHAIR POWELL-PALM: Thank you, Doug
6	for joining from the tractor, and I $\operatorname{}$ we all hear
7	you loud and clear that these meetings could be
8	better timed for a lot of farmers. But I just want
9	to give a huge shout up to those farmers who still
10	make it despite the challenges. So thank you for
11	your time today.
12	MR. CRABTREE: Well, thank you all and
13	let's see you in January next time.
14	CHAIR POWELL-PALM: All right, sounds
15	good. Next up we have Nate Lewis, followed by Ken
16	Dallmier, Emily Brown Rosen, and then we have
17	Maddie Kempner and Margaret Scoles to finish this
18	out today. After that, I'm going to go through
19	the list of folks who we missed, who weren't
20	available when we were first calling to see if
21	anyone is on the line as we do have a little bit

of time. So Nate Lewis, please go ahead.

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Hey, folks. MR. NATE LEWIS: 4 Nate Lewis, calling from Olympia, Washington, speaking 5 on behalf of our farm, Oyster Bay Farm. 6 My wife and I farmed together for about 20 years, we raised 7 organic pastured broilers and eggs, grass-fed 8 9 beef, lamb, pastured pork, vegetables and crops. We dabble in some shellfish raising oysters and 10 11 clams on the tidelands that we own on our farm and 12 we manage a small FSC certified timber lot for specialty wood products sold locally. My off-farm 1.3 job is with Washington Farmland Trust. 14 15 to preserve organic and sustainable farms in State of Washington. Before that, I was a farm policy 16 director at the Organic Trade Association and 17 18 before that, I was a certifier with the Washington 19 State Department of Ag and I ran the materials 20 So my past experience informs my review program. opinions and comments I want to provide. 2.1 But being

1	clear that their comments are purely my own. Or
2	behalf, I suppose of Oyster Bay Farm, but probably
3	more Nate Lewis, the policy wonk and advocate for
4	organics. I want to talk about the crops
5	subcommittee's recommendation on soil
6	fertilizers, I really support the move of the
7	recommendation from the practice standard 205-203
8	to the prohibited substances standard, so that
9	there are actual teeth on the potential use of these
10	substances. So I think the positioning of this
11	topic at 105 is appropriate. But there are two
12	areas that I think are lacking in the proposal.
13	One is that it doesn't address soluble fertilizers
14	of non-nitrogen form like phosphorus and potassium
15	and other macro and micro nutrients, and ther
16	secondly, it doesn't provide a mechanism for the
17	industry to petition or put forth
18	substance-specific restrictions that are more
19	appropriate for the types of products to
20	manufacturing. So if I were in your shoes, I would
21	pull this recommendation back one more time or a

1	few more times to get it right. This is a really
2	significant issue. We're talking about
3	non-synthetics, that are highly soluble and
4	clearly don't immediately align with organic
5	principles but that need, we do need guidance and
6	we do need mechanisms. So I would recommend
7	pulling it back, doing some more work and then the
8	products from that further work would be a
9	definition for the term and currently undefined
10	term mined substances of high solubility. And
11	then a recommendation that term be added to the
12	205-105 with the allowance that manufacturers'
13	petition to add restrictions to 602 to allow those
14	things. So I know at the end of the day and the
15	second thing, so that's a mental gymnastics, I'm
16	happy to expand upon that, but I think that would
17	achieve a lot of the goals and really give play
18	you know, give a good baseline for the good work
19	that you've already done. So thanks.
20	CHAIR POWELL-PALM: Thank you so much
21	for your comments. Amy has a question for you.

1	MEMBER BRUCH: Yes. Nate, thanks for
2	your time today. I really appreciate that.
3	Wanted to ask you, you had mentioned to define mine
4	substances of high solubility, and I was just going
5	to ask you what your definition would be of that
6	term
7	MR. NATE LEWIS: Yes.
8	MEMBER BRUCH: you forgot that part.
9	MR. NATE LEWIS: Yes. A little bit.
10	I think there's two pieces that we need to look
11	at. One is obviously the mined side, mined piece.
12	And I would want to be expansive on that. So it
13	wasn't just things you've dug out of a pit in the
14	ground. I view like we have like ammonia
15	extracts are mined from chicken manure piles. So
16	I think we need to be expansive on what mined means.
17	It doesn't necessarily have to only be things that
18	are dug out of a hole in the ground. And then high
19	solubility I think needs to be we need to be
20	working closely with our colleagues at APFCO and
21	the fertilizer definitions that they develop there

so that we're not putting liquid manure and, you know, manure lagoons into that category. We need to be clear that solubility has to do with plant availability, it has to do with the behavior of the substances in the soil they're SO that bypassing natural processes, and something along those lines. But I think we can really, as a community, focus on the mined piece and sort of what we're comfortable with. But then when we get high solubility, I think we really want to align with established terms that are already out there in APFCO definitions, that are used by state departments of agriculture to regulate fertilizer labeling and truthfully win there. MEMBER BRUCH: Thank you. CHAIR POWELL-PALM: Thank you very much for your comments today, Nate. Since we just

have a tad bit of time, I just want to hear, Nate.

You're both a farmer, but also someone who's works
with a lot of farmers. What's that ticket to
seeing organic grow, to where I can go into any

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gas station in Montana, rural America where we don't have co-ops or nicer grocery stores, and people pluck fresh organic fruits and vegetables from the shelves?

Gosh, Nate. I think MR. NATE LEWIS: it's going to be do mean that's sort of do a cop here, but it's going to really out site-specific, depending on the crops you're Depending on, you know, what your goals arowina. But I think the recipe is going to be are. education of farmers, I think that's been brought lot about, you know, getting farmers up comfortable with organic being option. I think distribution channels are obviously one of the major challenges and bottlenecks, and, you know, and then sort of reassigning how our government subsidizes food production. You know, there's a reason why Cheetos are cheap and organic apples are and part of it is it's more expensive to grow out organic apples, but also it's an alignment of priorities and resources.

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1	CHAIR POWELL-PALM: I appreciate it,
2	yes. I think we've been hearing. All right.
3	Thank you for your comments today. Next up, we
4	have Ken Dallmier, followed by Emily Brown Rosen,
5	and then Maddie Kempner. Ken, please go ahead.
6	MR. DALLMIER: Well, thank you.
7	Following Doug and Nate, that's quite a quite
8	shoes to fill. And one thing for Doug, we are
9	exceedingly jealous in Illinois, that he's seeding
10	out in Montana. And we actually have a little bit
11	of rain going on today in Illinois. So good
12	afternoon and thank you for the opportunity to
13	present our insights to NOSB. I'm Ken Dallmier
14	and the president of Clarkson Grain Company in
15	Cerro Gordo, Illinois. Clarkson Grain provides
16	organic and non-GM corn and soy beans to global
17	and domestic food markets. We also provide
18	organic and non-GM soy lecithin which is used as
19	a food ingredient in consumer products from
20	chocolates to infant formula. The \$60 billion
21	value of the organic market is unique and driven

by the faith and trust in USDA or organic seal and the integrity of those who follow the production practices ascribed to that seal. We would submit three ideas to the NOSB to reduce the incident and incentives to fraudulent activities within that seal.

First, to improve domestic market demand, by tightly regulating the import of organic grain into the United States. Expand the harmonized tariff schedule codes to cover organic soy meal for feed and organic soy beans for oil stuck. Organic soy lecithin and organic sweeping grain for meal for feed. These new HTS codes will allow mass balance comparisons to highlight regions of imbalance and thus potential fraud.

Secondly, direct the USDA to utilize its recall authority for products not in compliance with the USDA organic seal on the label. A punitive fine, should be leveled on companies selling products found to be out of compliance with the organic seal.

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Thirdly, we would require organic
certificates to declare crop by acreage to
establish a mechanism for mass balance. The
grower would then have to balance production and
sales equation with their certifier who would
update the NOP integrity database. These action
items enforce already existing regulations and
norms of the U.S. organic market. They provide
mechanisms and incentives to consistently apply
their organic regulations across the globe,
provided for action when fraud is suspected, and
provide significant disincentives to running the
risks inherent in a process system. USDA organic
seal has grown from an idea into a \$60 billion
marketplace. To continue that growth trajectory,
a solid regulatory structure needs to be
consistently applied across both supply and
demand. By continuing to allow interpretation and
implementation at a local level of those
regulations, we risk losing that customer trust.
Thank you very much for your time and your

1	attention. And if there is extra time, I'm happy
2	to field any questions.
3	CHAIR POWELL-PALM: Thank you very
4	much for your comments today. Any questions from
5	the Board? Amy, please go ahead.
6	MEMBER BRUCH: Yes. Thank you, Nate.
7	Thank you, Ken, for your time today. I really
8	appreciate it, and if you can send the rain our
9	way. We'd love that anyway I want to
10	MR. DALLMIER: Any time.
11	MEMBER BRUCH: I want to appreciate and
12	recognizes your ideas just to deter fraud, I think
13	the three that you brought up were pretty
14	interesting. The numbers 3 is one that we
15	currently are discussing amongst our subcommittee.
16	MR. DALLMIER: Yes.
17	MEMBER BRUCH: About just recognizing
18	acres by crop on certificates and getting and
19	we're getting today and Tuesday some great feedback
20	from stakeholders. You had mentioned kind of that
21	farmers and certifiers, inspectors can kind of work

together to see that mass balancing. Do you as a purchaser of organic soy beans and corn feel that you could also get into that equation and do a quick mass balance if you see what a farmer is selling to you as to production if that's evident on the certificate?

Yes, of course. MR. DALLMIER: That would be on several layers, actually. On the first layer, organic integrity I think that that's But as a buyer to make sure that self-evident. in lean years that that balance is correct. Ιn other words, we're not bringing in non-organic grain into an organic contract. And on strong years that we're looking at right now where in some cases, very early organic contracts are -- were consummated below the current non-organic price. All of a sudden you have crop failure. Not saying that it's right or wrong, but it'd be a good way to check that. So I think there are many, not only on the organic integrity side, but I think on the business side, that would also be a very good

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business tool, on both the supply and the demand 1 side. 2 3 CHAIR POWELL-PALM: Thank you for that question, Ιf there aren't any 4 Amy. 5 questions, I have one for you, Ken. 6 MR. DALLMIER: Yes, sir. 7 It sounds -- we've CHAIR POWELL-PALM: several commenters note that oftentimes 8 had farmers don't have just one buyer. In the world 9 10 of grain commodities, it seems like there's 11 actually, oftentimes, growers selling one maybe 12 to two different buyers, and lots of times buyers buy significant portions of a farm's production. 1.3 And so when you have growers come in, being able 14 to spot check -- say they have ten trucks lined 15 up at your elevator, being able to spot check does 16 17 that math work out, do you think that would be a 18 useful red flag to be able to go to possibly that 19 grower certified and say it seems like there's a 20 lot of grain coming in here compared to the acres, and just be able to crowd source concern? 2.1

1	MR. DALLMIER: Short answer is yes.
2	The longer answer is you'd have to be a bit careful
3	about how you do that.
4	CHAIR POWELL-PALM: Yes.
5	MR. DALLMIER: But we know that, as
6	Nate brought up I believe, domestic, you know,
7	we're not our domestic house isn't lily-white
8	either. So we need to make sure that in a
9	process-based system that there are checks and
10	balances. And that system needs to work
11	cooperatively to ensure that the integrity of the
12	label on from the domestic side as well as from
13	the international import side is true. And really
14	that's, to me, the single biggest risk of the value
15	of the USDA organic label, is that is loss of
16	that trust whether it be domestically or
17	internationally.
18	CHAIR POWELL-PALM: Absolutely.
19	Thank you so much.
20	MR. DALLMIER: Thank you for your
21	question.

1	CHAIR POWELL-PALM: I appreciate your
2	time today and your insights. Any other questions
3	for Ken from the Board? All right. Thank you,
4	Ken.
5	MR. DALLMIER: Thank you very much.
6	CHAIR POWELL-PALM: Next up, we have
7	Emily Brown Rosen, followed by Maddie Kempner, and
8	then Margaret Scoles. Emily, please go ahead.
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10	MS. BROWN ROSEN: Hello, I'm Emily
11	Brown Rosen, Organic Research Associates, and I'm
12	glad to be speaking with you-all this afternoon.
13	I'd also like to welcome all the new members to
14	the board. It's great to see so many new faces
15	and very well-qualified people. For those who do
16	not know me, I work in organic certification,
17	organic technical support, materials review for
18	OMRI and then I ended up working at USDA NOP in
19	the standards division for quite a few years. One
20	of the issues I worked on there was the whole issue
21	of inert ingredients and pesticides. And I helped

1	facilitate the inerts working group which met over
2	quite a few years starting in 2010 and we ended
3	up with the group that included EPA, USDA, and NOSB
4	members and ended up with a recommendation that
5	went to the board that ended up being modified a
6	bit and turned out to be the NOSB recommendation
7	of 2015 to change the annotation on inerts as it
8	is now. So that was a long process. I mean, it's
9	been even longer processes since the year 2000
10	trying figure out how to review inerts and organic.
11	And we still we're not really there yet. So
12	I know you I really understand your problems
13	and frustrations of trying to deal with this issue
14	on distilled tall oil, which is which I commented
15	on. I wanted to comment tot I need to make a
16	correction in my written comments. I misquoted
17	the EPA references there because I mistakenly
18	looked at the 2010 technical review rather than
19	2021 one. So basically it's not a very significant
20	difference but I just want to point out in response
21	to the discussion document question number 3 about

1	how EPA classifies distilled tall oil. It is
2	considered exempt from tolerance, as an inert
3	ingredient and it's listed that 40 CFR 18910,
4	18920, 18930 for pre and post service crop use as
5	well as livestock use. The kind of you know,
6	I had sort of said that it was in my previous
7	comment, I said it was a lot of the active pesticide
8	ingredient which is not true. It's listed there
9	as an inert ingredient. However, all those typos
10	and PPA, if they have a register, have a opening
11	paragraph that acknowledges that these things are
12	exempt from the requirement of a tolerance when
13	used as an occasionally active ingredient. So it
14	seemed a little bit ambiguous how EPA is
15	considering them. The '21 technical review does
16	mention some scientific research on the actual
17	pesticide use as an active ingredient. However,
18	the petition does describe it's used solely as an
19	inert ingredient, used as a disinfectant, as a
20	sticker, as a solvent, and that's really the
21	purpose that you-all should be reviewing it for.

But overall, the bigger problem here is the whole 1 how to review inert ingredients at all, given that 2 3 not moved forward with the changing I can add a little more, if you want. 4 annotation . 5 Thank you. 6 CHAIR POWELL-PALM: Thank you so much 7 for your comments today. Your name has come up several times as being an invaluable resource, so 8 we really appreciate your participation. 9 10 please go ahead. 11 MEMBER CALDWELL: Emily, thanks for 12 I've been struggling with this vour comments. whole differentiation between active ingredient 1.3 and inert ingredient for the distilled tall oil 14 15 and probably for everything else too. But in this case, it really looks from the research articles 16 17 cited that show that distilled tall oil does have 18 insecticidal efficacy. it make So does а 19 difference if it's called an active ingredient or 20 called an inert? That's the first sort of question

there. And the second one is that the rates that

are in the petition are relatively low rates and probably below what we would normally think of as active ingredient rates. And yet, the inert ingredients can be used in products for 99 percent of some products are inert. This is really confusing to me but if the petition says it's only used at a certain rate like 20 percent of product or something like that, but would the manufacturers of these pesticides be held to that or can they just say, well, it's just an inert ingredient, we can kind of use as much as we want? I don't know if you see what I'm asking here.

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MS. BROWN ROSEN: Yes, I understand that. I think it's difficult, yes. I don't know if it really matters a lot that it's called inert or active because it does seem like there's -- they have both properties. However EPA has allowed it to be called inactive or inert, and so that means it's not on the label which makes it a lot harder for farmers or anybody to know that it's there.

1	But the fact that it's, you know, the way we have
2	since EPA recognized it as inert, and it
3	functions on that registered pesticide as inert.
4	I mean they will look at the pesticides as you
5	know case by case for each one. If they felt there
6	was really an active ingredient it didn't qualify
7	for inert then it wouldn't be on the label as
8	inactive. So you I think by if you agree
9	to put it on the list as an inert, that protects
10	it from being used beyond that capacity in organic.
11	It would also have to be possibly separately
12	listed as an active if you if somebody wanted
13	to formulate it with and EPA decided it was an
14	active ingredient, You know, I think that Kevin
15	already knows, it's EPA's call on this, you know?
16	USDA doesn't really have a whole lot to say about
17	how pesticides are labeled. So, you know, you
18	really kind of need to work within the framework
19	of EPA, but not step on their toes or else it's
20	just not going to fly through the, you know,
21	regulatory process. So I you know, in some ways

1	it doesn't matter, but I think it kind of protects
2	organic to call it inert but then have clear rules
3	for what inerts are allowed. That's where the
4	problem is now. It's like we've got, like OMRI
5	pointed out in their comments, there is a lot of
6	things on the old obsolete list for that are
7	currently allowed in organic products that are very
8	closely related to tall fatty acids and some looked
9	like they might be worse somewhat might be better,
10	but none of them have been reviewed by the NOSB.
11	So if we go forward with case-by-case review and
12	then we also held all this force from sitting out
13	there, it's going to be a very inconsistent list.
14	And you might see decisions that are made that
15	are some are fair, some are maybe not so fair, based
16	on, you know, of what time period they got allowed,
17	and they're all being allowed. So that's why I'm
18	just really hoping you can work within a periodic
19	time to try get further action on this, and PR and
20	change the rules so that everybody's, you know,
21	following the same plan or the same rules to get

Τ	approved and considered.
2	MEMBER CALDWELL: Well, thanks, Emily.
3	We may rely more on your expertise as we tried
4	to weave through this, to me pretty densely
5	incomprehensible process of understanding the
6	inerts and how they're regulated. So really,
7	really appreciate that. Thank you.
8	MS. BROWN ROSEN: Sir, you are
9	welcomed.
10	CHAIR POWELL-PALM: I apologize. I
11	knew I was going to mess up once, so thank you for
12	your time and expertise today, Emily, really
13	appreciate it.
14	MS. BROWN ROSEN: Thank you.
15	CHAIR POWELL-PALM: All right. Next
16	up, we have Maddie Kempner and then Margaret Scoles
17	and then we'll run through the list, see if folks
18	who we missed may want to comment. Maddie, please
19	go ahead.
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21	MS. KEMPNER: Hi, Nate, and thanks

1	everybody for your time today. My name is Maddie
2	Kempner and I'm the policy director at the
3	Northeast Organic Farming Association of Vermont.
4	Our accredited certification program for Vermont
5	Organic Farmers certifies nearly 800 farmers and
6	handlers in Vermont. I really, really appreciate
7	the work of the NOSB members and your dedication
8	to organic integrity, especially on behalf of
9	organic producers here in Vermont. And I first
10	want to make a comment about hydroponics in
11	organic. In Vermont, organic farmers are part of
12	an informal group of certification, education, and
13	policy organizations who agree that soil is the
14	foundation of organic agriculture, and who strive
15	to achieve consistency in our organizational
16	policies and certification decisions.
17	Specifically, we agree on the following: soil is
18	the foundation of organic agriculture. And a full
19	reading of OEFFA in the organic regulations
20	requires that organic plants be grown in soil.
21	Airponic, hydroponic, and crops grown to maturity

1	in containers do not comply with OEFFA 6513-V1.
2	We can't achieve consistency in our policies and
3	decisions until the NOP goes through the formal
4	making process for greenhouse production standards
5	which were recommended by NOSB nearly 20 years ago.
6	And we cannot achieve consistency in our policies
7	and decisions until containers go through the
8	process of NOSB discussion or recommendation and
9	NOP rulemaking. The members in this group agree
L 0	that the following crops grown in containers have
L1	historically been certified organic and should be
L2	allowed to be certified moving forward including
L3	sprouts, microgreens, spotter, transplants, and
L 4	mushrooms. And we acknowledge they still these
L5	items still require NOSB discussion,
L 6	recommendation, and rulemaking to improve the
L7	consistency of existing certification of these
L8	products. The 2010 NOSB recommendation on
L 9	terrestrial plants in containers and enclosures
20	should be used as a starting point.

To address these inconsistencies, we

urge NOSB to activate the latent agenda item field and container -- excuse me, field and greenhouse container production. And we would happily provide detailed input as to the forward movement of this agenda item with the shared goal of improved transparency and consistency and bringing us integrator alignment with the global organic movement, including the recent IFOAM position on hydroponics.

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Secondly, I want to comment on the NOSB's proposal to limit use of nitrogen fertilizers with the C to N ratio of three to one or less to a maximum of 20 percent of a crop's needs. NOFA Vermont and DOF support this proposal and even our producers would sometimes rely on these during especially cold products and conditions, support limiting their used to 20 percent of crop needs. And as a member of the policy committee of the Organic Farmers Association, I also want to provide some

1	clarification on a comment you received from OFA
2	earlier in this week's meeting. I want to share
3	with the Board that while it has not yet been
4	officially adopted by our farmer membership as an
5	approved OFA policy, the policy committee has voted
6	unanimously to support the NOSB's proposals to
7	limit use of nitrogen fertilizers. And I will
8	close by saying that personally, I really see both
9	of these issues as critical to organic truly living
10	up to what I think most people in our community
11	aspire for it to be, which is not only climate smart
12	agriculture as it might be defined by USDA, but
13	a type of agriculture that represents a meaningful
14	solutions for ecological and biological crisis.
15	Organic farming should promote biodiversity
16	below-ground, above ground, and at a landscape
17	scale. And without healthy living soil as a
18	foundation, the principles that led to the creation
19	and I continued to guide so many of our
20	producers and what they do every day will be
21	rendered meaningless. Thanks.

CHAIR POWELL-PALM: Thank you very 1 2 much for your comments. Do we have any questions 3 from the Board? Since we have a minute before our last couple of commenters, I have a question for 4 5 Could you just repeat that last two sentences 6 of your comments. 7 MS. KEMPNER: Do you want me to just reread it to you or do you want me to like say from 8 9 my heart again? 10 CHAIR POWELL-PALM: Either way. The 11 rendered meaningless part, I didn't guite catch 12 the whole thing. Essentially my thought 13 MS. KEMPNER: behind them and why the issue of hydroponics and 14 15 highly soluble nitrogen fertilizers are important to me and I think our community in our produces 16 17 in Vermont as a whole is these issues are really 18 tied to organic being based in the soil as a 19 foundational issue and that soil being sort of a 20 living, breathing biological organism that is the basis of all life. And without which, farming just 2.1

happens as a system of inputs in and crops out. 1 That's not tied to our greater ecology as I think 2 3 organic was intended to be. So I think, you know, by allowing the use of highly soluble fertilizers 4 significant and 5 to degree, by allowing hydroponics, we're really removing farming from 6 7 that broader ecological context, which I think is so important to organic really being a meaningful 8 9 climate solution.

that. Then my question for you would be: If we look at the total percentage of food coming from hydroponics versus all of the farmers producing soil-based foods like grains, dairy, forages, what is the balance we can strike for saying what we aspire the organic industry to be and how we still honor that — not to toot my own horn, I was out seeding 16 hours a day. And the only reason I can be a farmer is because of organic or folks who have commented that they were able to come back to the farm because of organic. With these broad

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1	sweeping statements that something like HSN or
2	hydroponics rendered everyone else's work
3	meaningless. Would you expand on that a little
4	bit and maybe clarify?
5	MS. KEMPNER: Yes. And I don't mean
6	to say that it rendered everyone else's work
7	meaningless. I think I just mean that it really
8	goes against what I see is the foundational
9	principles that led to the creation of OEFFA. I
10	don't mean that the work that other folks are doing
11	is meaningless, or that the work that producers
12	who are still producing in the soil is meaningless,
13	that's not what I mean to say at all. I just mean
14	that if we ignore living soil as the foundation,
15	it just really goes against those founding
16	principles. And in some ways renders those
17	principles potentially meaningless if we go down
18	this road of moving toward a system of agriculture
19	that's really dependent on outside inputs in that
20	way, if that makes sense.
21	CHAIR POWELL-PALM: It does, it does,

Thank you for that clarification. 1 yes. All 2 Well, thank you so much for your comments 3 todav. I appreciate it. Next up, we have Margaret Scoles and then our last commenter today 4 5 is going to be Kris Klokkenga. So Margaret, please 6 go ahead. 7 MS. SCOLES: Thanks. Margaret Scoles, 8 International Organic Inspectors 9 Association. Members of the NOSB, NOP, friends, 10 and colleagues, my comments today are different 11 from our written comments submitted. IOIA is a 12 leading worldwide training and networking 13 association for organic inspectors. I'm here to express gratitude. More than a year ago Dr. Tucker 14 15 published a human capital memo, you the, NOSB opened it up for public comment by making it a 16 17 discussion document in 2020 leading to 18 recommendation which provided the foundation for 19 the NOP to release a request for applications and

of this work paved the way for a very important

funding to address human capital concerns.

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initiative. At the spring NOSB meeting 2021, IOIA
announced our new apprenticeship intensive program
to help onboard inspectors faster and more
effectively.

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lack Apprenticeship, the of was consistently identified as one of the biggest barriers to a professional career path, partnering with Organic Valley, IOIA will deliver livestock apprenticeship, intensive training this year. Everyone agreed that human capital was a critical issue. This lack of diversity among organic professionals with another concern. NOP released funding a little more than six months ago only. IOIA is privileged to be a partner in four of the projects funded. The impact on our community has been astounding. Here are some of the things that have happened. IOIA was funded to develop an inspector apprenticeship tool kit that other organizations could use to help recruit and train new inspectors. I spent last week in Kentucky as

1	co-trainer for a very diverse cohort of crop
2	inspection training participants, we removed the
3	barrier of cost. They did not pay to participate.
4	As for several additional questions to avoid
5	screening out diverse participants and targeted
6	new and diverse audiences. We work with regional
7	organizations to reach new audiences. And with
8	the University of Kentucky and Kentucky State
9	University to develop robust curriculum. Most
10	participants were under 35, many were smaller scale
11	farmers. Three of 17 were African-American. All
12	were happy to help ground truth the training
13	concepts. Crop apprenticeship intensive is
14	coming up in Kentucky in just a few weeks with many
15	BIPOC applicants. Through a project led by
16	Organic Farmers Association, many DEI training
17	opportunities have been offered. The five
18	partners, including IOIA, each had the opportunity
19	to take on a BIPOC intern. IOIA's young
20	African-American intern is training to become an
21	organic inspector, or reviewer, or both. Oregon

Health used a project where universities identifying gaps in existing organic curricula and creating resources to fill some of those gaps, and internships through OSU. Organic The Integrity Cooperative Guild is developing a new inspectors cooperative model, SO much different landscape than one year ago. It's fantastic to see our sector working together. Thank you.

Thank you so much CHAIR POWELL-PALM: for your comments. Any questions for Margaret? I'm going to chastise myself preemptively from making a comment since it's not as much a question, but I just wanted to say that oftentimes we focus a lot on what's going wrong in our industry and I think there's a lot that's going right. think this is an especially exciting moment to have identified such a noticeable issue barrier. impending crisis, as we look to keep the human capital resources we have in the industry, and the work that IOIA has done through the NOP I think

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1	has made a real impact already. And I think seeing
2	the folks who have commented today and on Tuesday,
3	we can see that there's a breakthrough with who
4	is able to participate in the organic industry.
5	And I think that's going to make us more relevant
6	but also more resilient in the future. So thank
7	you for your work.
8	MS. SCOLES: Thank you. And I hope you
9	saw the chat from an NOSB member who had that intern
10	as a graduate student.
11	CHAIR POWELL-PALM: Yes. Dilip has a
12	question for you real quick.
13	MEMBER NANDWANI: No. Sorry. It's
14	not a question, actually. I, kind of, privately
15	messaged to Margaret that he was my student.
16	CHAIR POWELL-PALM: Okay.
17	MEMBER NANDWANI: Just wanted to say
18	that and
19	CHAIR POWELL-PALM: Fantastic.
20	MEMBER NANDWANI: So since I asked
21	that, can I ask that so African-American

1	students, and there are a lot of African-American
2	farmers who are minority farmers and I deal with
3	them almost every day. Do you say it's a good sign
4	that African-American also whether students or
5	trainees are coming to get this inspection training
6	and it's I think it's a good sign, isn't it?
7	MS. SCOLES: I definitely think it's
8	a good sign.
9	MEMBER NANDWANI: Thank you for your
L 0	comments. I appreciate it.
L1	MS. SCOLES: Thanks.
12	CHAIR POWELL-PALM: Liz has a question
13	for you.
L 4	MEMBER GRAZNAK: I was just curious to
15	know so you said that you received some funding
L 6	from NOP. Did I hear that correctly?
L7	MS. SCOLES: Right.
L 8	MEMBER GRAZNAK: Yes. How long is the
L 9	funding stint, how long is it for?
20	MS. SCOLES: It's just a one year
21	project.

Yes. 1 MEMBER GRAZNAK: 2 And it finishes in MS. SCOLES: 3 September. So it -- during this year, we're developing a tool kit for apprenticeship. 4 that includes some training with groups that are 5 selected to run through it and give evaluation 6 7 feedback, and hopefully improve the final product of the tool kit. 8 9 MEMBER GRAZNAK: And what about for 10 future years, how do you see being able to afford 11 doing this work? Say next year without the 12 funding? We do think there's going 13 MS. SCOLES: to have to be some government support, and there's 14 15 a lot of different ways it could go. Because an intensive apprenticeship intensive that takes a 16 17 whole year and takes small groups of five or six 18 people to four farms, it's very expensive compared 19 to -- people say now sometimes basic training is 20 expensive. It's actually very cheap compared to what it costs to do this type of training which 2.1

1	we feel like is a really viable learning option
2	but making it affordable. We are investigating
3	partnering with universities and maybe with
4	apprenticeship.gov which is a program that you can
5	develop apprenticeship that is supported partially
6	by the government. And we think that people should
7	pay something to take the training. These people
8	are not paying anything, but we do believe there
9	should be participation to commitment and
10	hopefully certification agency are actually are
11	likely as they currently send a lot of people to
12	basic training, they would probably pay part of
13	the cost to put new inspectors through the program.
14	Because it takes a lot of work to onboard a new
15	inspector if it's a way to do it efficiently and
16	more effectively, that means that it isn't
17	expensive, it's a good bargain. Thanks for your
18	question.
19	MEMBER GRAZNAK: Sure. Thank you.
20	CHAIR POWELL-PALM: Any other
21	questions for Margaret? All right. Really

appreciate your time and work Margaret. Thank
you. Lastly we have Kris. Kris, are you on the
line?

4 MR. KLOKKENGA: Yes, I am.

5 CHAIR POWELL-PALM: All right.

6 Please go ahead.

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Hi. My name is Kris MR. KLOKKENGA: Klokkenga. I will apologize that I missed my time slot earlier because I didn't realize you were on a different time zone than I'm in. So I'm located in Central Illinois and halfway between Chicago Louis. I am an organic farmer here, and and St. I wanted to speak regarding the regulations for importing organic grain from other countries. have -- my previous experience, I worked in Ghana, West Africa from 2008 to 2016 for two years with an agricultural processor specifically processing shea nuts and then for the next six years, I had my own farm there where I grew two crops of corn for four years basically. And so just -- I just

want to speak with the to the integrity a little
bit, of how grain from those other countries and
just wanted to give an opinion that it can be very
just seeing I didn't work specifically in
the organic atmosphere when I was there, but just
wanted to say that the integrity that is practiced
in developing countries can sometimes be
questionable. The other thing for me is just in
regards to being able to have markets. Since I'm
in Central Illinois, I try to practice a robust
crop rotation used in corn and soy beans primarily,
but also wanting to grow alfalfa, barley, oats,
and especially when it comes to marketing my small
grains in my location, even though they help me
on my with my rotation and my soil health, I
feel like when we bring in grain from other
countries, then that hinders the local farmer or
the domestic farmer, organic farmer here in the
United States. And so I also recognize that if
you're going to have regulation for the internet,
I would also speak that it's not only necessary

to have regulations for the importing of grain, 1 but also for domestic end-users that they're able 2 3 to take notice of, you know, the delivery, the traceability every time that I submitted a load 4 of grain, I've submit a bill of lading. 5 6 those being used, and what in what ways are they traced through the process? 7 So I just want to thank you for your time here today to listen to 8 9 me, and be happy to take any questions if you have them, but just want to also just reiterate that, 10 11 I just think that it's necessary to have those 12 regulations in place and I would employ yes, we try to, you know, limit the amount of organic grain 13 that can be important in the United States. 14 15 CHAIR POWELL-PALM: Really appreciate you taking the time to speak with us today. 16 questions for Kris from the Board? 17 Amv, please 18 go ahead. 19 Sure, Kris, thanks for MEMBER BRUCH: 20 your time today really appreciate it. Bring up a couple of big topics on integrity and market 21

1	viability. The question you mentioned at the end
2	about those with lading. Have you ever seen on
3	your reconciliation form that you or your
4	settlement sheet that you received from your grain
5	buyer any indication of your lot number, your lot
6	tracking system?
7	MR. KLOKKENGA: In my settlement
8	sheets that I received, I have not seen that. I
9	deliver grain to or I supply grain to three or four
10	end-users and I have not I of course we have to
11	submit a bill of lading each time, but outside of
12	me having that bill of lading, I'm not sure what
13	so the answer to your question is no.
14	MEMBER BRUCH: Thank you. That's
15	definitely something that we'll be talking about
16	in our upcoming board meetings so I appreciate your
17	input.
18	MR. KLOKKENGA: Yes.
19	CHAIR POWELL-PALM: Thank you. Yes.
20	Kim, please go ahead.
21	MEMBER HUSEMAN: Hi, Kris, thank you

1	for your comments today. Maybe small follow-up
2	from Amy's question about BOLs. Does your
3	certifying body reconcile your acres and yields
4	for you on an annualized pieces?
5	MR. KLOKKENGA: Yes. Every year the
6	certifier that I use goes through this mass balance
7	has to be calculated, then that has to come into
8	a certain, whatever is an acceptable range for them
9	after I provide them all of my settlement sheets.
LO	MEMBER HUSEMAN: So you do provide that
L1	your settlement sheets to your certifying body?
12	MR. KLOKKENGA: Yes, I provide so
13	I my yes, I do. They require all of that. But
L 4	from the settlement sheets, there's no place on
L5	there that you're seeing my reference bill of
L 6	lading number to my to the best of my knowledge.
L7	MEMBER HUSEMAN: Thank you.
L 8	CHAIR POWELL-PALM: So if I may offer
L 9	just one clarification question on that real quick.
20	So you have all of your settlement sheets from
21	your buyer, you have all the bills of lading you

1	submitted, but there's not really connector
2	between them other than your name?
3	MR. KLOKKENGA: Other than my name and
4	the load numbers that go, you know, I mean, like
5	so the way that I do it is that I state my contract
6	number and then load number. So load number 1,
7	I know that that was the first date that, you know,
8	and then your dates would march up there to
9	everything. If you delivered two in a day, then
LO	you'd be able to see that, but that is how that's
L1	one way for them to reconcile that.
L2	CHAIR POWELL-PALM: Sure. Thank you.
L3	Dilip, do you have a question?
L 4	MEMBER NANDWANI: Yes. Very quick.
L 5	Thank you for your comments, Kris, really
L 6	appreciated your thoughts. This is a quick
L7	question. We've been hearing a lot about the, you
L 8	know, this incubatory and fraud and organic buses,
L 9	you know, conventional. So do you know or do you
20	have any tools or your certifier which can test
21	or identify versus conventional methods? I know

1	that there are some tools which you can use to
2	detect genetically thing and GM and some of the
3	contamination. But other than that, are you aware
4	of that? Thank you.
5	MR. KLOKKENGA: Thank you, Dilip, for
6	your question. I am not the only way that I
7	am aware I mean, I don't think that you could
8	if my neighbor grew non-GMO soy beans and tried
9	to market them as organic, I don't know that there
10	would be any way that one could differentiate that.
11	I'm not aware of any test except a non-GMO test,
12	but maybe something else exists.
13	CHAIR POWELL-PALM: Thank you. Kim,
14	please go ahead.
15	MEMBER HUSEMAN: I'm going to ask one
16	more follow up for Kris and it's a slightly
17	different topic. But you had mentioned earlier
18	about growing crops to feed the soil and the
19	systemic nature of your organization or it were
20	your crop rotation
21	MR. KLOKKENGA: Right.

1	MEMBER HUSEMAN: you know, the
2	livestock group and this is reason why I'm bringing
3	this up is part of our research priorities.
4	Because to your point, corn and soy are the backbone
5	to feeding any livestock in the U.S., whether it's
6	organic or conventional. But we know that's in
7	order to create the holistic system that other
8	grains, other legumes, other seed need to be
9	introduced into the soil, but there's always the
10	hindrance from a marketing standpoint. Can you
11	elaborate on some of the marketing hindrances or
12	resources that you might be to have found to be
13	hopeful to help market some of the other small
14	grains. Oats, or barley, or sunflowers, or, you
15	know, alfalfa just, can elaborate in that space
16	if you would, please?
17	
18	MR. KLOKKENGA: Okay. So this was my
19	first year and growing alfalfa and I'm growing
20	alfalfa for my benefit to introduce a different
21	hormone into the soil to hope help with weed control

1	the following year. So I'm doing oats and alfalfa
2	one year as a nurse crop in the alfalfa. So one
3	of the ways that I marketing that which I have not
4	been able to market my alfalfa organically because
5	I am in such in Central Illinois here, I'm in
6	such a livestock deficit. There's almost no
7	livestock around me. So what I found myself doing
8	is I'm traveling then 120 miles south to St. Louis
9	where I'm trying to meet and I found this on
10	hayexchange.com is just so I'm not if I'm just using
11	a website there to try to get my product marketed,
12	but I don't really have a connection to figure out
13	where the organic farmers in my area that could
14	use that. So I don't have access to that. And
15	then so that's one. And then like barley, this
16	year with my barley, it's first time for me growing
17	that and I'm going to go ahead and probably reach
18	out to the gentlemen that sold me the seed and find
19	out, you know, where can I go with that? But like
20	also on my oats the oats I'm growing, they're
21	not I'm not growing those organic oats, because

1	I've just the only place that I've been able
2	to find to market my oats, is to a seed company,
3	that just wants me to grow oat seed for them and
4	since nobody else in our area really participates
5	in a lot of oats growing, you won't find it much
6	in Central Illinois. They're happy to have me even
7	though they're organic. I just saw them to them
8	as a non-organic oat, even though it's produced
9	organically.
10	MEMBER HUSEMAN: Thank you. This is
11	an area, I think, where we are seeing more focus
12	needing to be put. It's really high on my radar
13	and having input it from you and other farmers in
14	the space is really important. So I really
15	appreciate your time.
16	MR. KLOKKENGA: Yes. Well, thank you.
17	I hope that you're able to find better ways for
18	us to market the products that we produce.
19	CHAIR POWELL-PALM: Javier has a
20	question for you.
21	MEMBER ZAMORA: Kris, thank you so much

for your comments and I feel that your feelings 1 express that there is no clear method that is being 2 3 utilized to identify where the fraud is happening. And I, as a grower, I hear a lot of people, you 4 know, bringing the subject, but what do you have 5 6 -- do you have an example of how to really identify these things? Do you think testing will probably 7 just take care of it as a fellow member alluded 8 Instead of -- because it seems like 9 to earlier? 10 paperwork has a greater chance to be, you know, kind of falsified and be creative with. 11 So what 12 do you see? How can this Board make things easier to identify where something out of order 1.3 happening? 14 15 MR. KLOKKENGA: I just think that -so I don't have -- there's not one great idea that 16 But one thing that I'm -- that I can give you. 17 I would say is this, if you could have some kind 18 of way that you are going to require that each 19 person, like for the bill of lading example, like 20 me as a grower that I sell to the next elevator 2.1

who processes my grain and sells it onto a corn 1 tortilla manufacturer, that they might be able to 2 3 -- that you might be able to streamline that process amongst the producer, the middleman, and the 4 end-user so that that could be done. I don't know 5 that you're going to find -- I don't know what test 6 7 to tell you to do and I'm not familiar with that, but I would just say streamlining that process and 8 9 maybe just giving -- I don't know if you would call that all the paperwork that we do is antiquated, 10 11 but maybe just finding out more of a helpful way using technology to be able to streamline that 12 process. And, again, I'm sure that that would --13 there's -- fraud can happen in that way as well, 14 15 but something being able to go from the producer to the end-user and maybe having some way that they 16 can identify that. Thank you. 17 18 CHAIR POWELL-PALM: Thank you so much 19 for fielding all these questions, Kris. Really appreciate your time today. Well, I'm -- and like 20 several times before, the 2.1 said. farmer Ι

1	perspective is invaluable. So thank you for
2	making the time and taking it out of your schedule.
3	MR. KLOKKENGA: Thank you.
4	CHAIR POWELL-PALM: All right, folks,
5	we've made it to the end of day 2, so that concludes
6	today's public comment webinar and I can't thank
7	everyone enough for taking the time out of their
8	days to join us. This is what makes our community
9	great and I'm really excited for next week's
10	meeting. If there are any closing questions or
11	comments from the Board, we can fill them now,
12	otherwise, we will let you all to your day. All
13	right. Well, thank you again, everybody.
14	MR. KLOKKENGA: Thank you.
15	MEMBER CALDWELL: Thanks, everybody.
16	MEMBER HUSEMAN: Thank you.
17	CHAIR POWELL-PALM: Jared Clarke
18	MEMBER ZAMORA: Adios.
19	CHAIR POWELL-PALM: All right. So
20	thank you for the slides and next week's NOSB
21	meeting, hope you all are there too. It's going

1	to be start on Tuesday, April 26 at noon Eastern
2	and anything you'd like to say about that,
3	Michelle?
4	MS. ARSENAULT: No. I think you're
5	good. The link to join the meeting is on the NOSB
6	meeting webpage. It's also at the top of your
7	agenda.
8	(Whereupon, the above-entitled matter
9	went off the record at 4:38 p.m.)
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UNITED STATES DEPARTMENT OF AGRICULTURE

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NATIONAL ORGANIC STANDARDS BOARD

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SPRING 2022 MEETING

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TUESDAY
APRIL 26, 2022

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The Board met via Videoconference at 12:00 p.m., Nate Powell-Palm, Chair, presiding.

PRESENT

NATE POWELL-PALM, Chair
MINDEE JEFFERY, Vice Chair
KYLA SMITH, Secretary
AMY BRUCH
BRIAN CALDWELL
JERRY D'AMORE
CAROLYN DIMITRI
ELIZABETH GRAZNAK
RICK GREENWOOD
KIM HUSEMAN
ALLISON JOHNSON
DILIP NANDWANI
LOGAN PETREY
WOOD TURNER
JAVIER ZAMORA

NOP STAFF PRESENT

MICHELLE ARSENAULT, Advisory Committee Specialist JARED CLARK, National List Manager

DAVID GLASGOW, National Organic Program Associate Deputy Administrator

ERIN HEALY, Standards Division Director

ANDREA HOLM, Materials Specialist

DEVON PATTILLO, Standards Acting Assistant Director

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

ALSO PRESENT

SEAN BABINGTON, Senior Climate Advisor, USDA ADAM CHAMBERS, Scientific Lead for Environmental Markets, Natural Resources Conservation Service (NRCS)

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Livestock Subcommittee (LS)
Topics: 2024 Sunset substances reviews: Chlorhexidine Tolazoline
Compliance, Accreditation, & Certification Subcommittee (CACS) Update
Topics: Proposal: NOP Risk Mitigation Table review 166 Discussion Document: Human Capital Management: Supporting the Work of the NOSB

1	P-R-O-C-E-E-D-I-N-G-S
2	(12:00 p.m.)
3	MS. ARSENAULT: Our attendees are
4	jumping up again here. Welcome, folks. So I think
5	we'll get started. Good, Nate. Ready to get
6	started?
7	MR. POWELL-PALM: Let's do it.
8	MS. ARSENAULT: All right. So
9	welcome, folks. It's day one of the National
10	Organic Standards Board spring meeting. If you
11	are attendees are in listen only mode, so you
12	will not have access to your mic or a camera. The
13	chat is enabled, however, so feel free to chat in,
14	say hello, let people know where you're calling
15	in from. And you can chat with each other, and
16	you should be able to chat with everybody or one
17	person if you so choose.
18	Chats are not part of the public record.
19	So if you're asking questions of the board, we
20	won't be answering those questions, and it won't
21	be part of the record. We do have a
22	transcriptionist on the line with us, and we do

have the live transcripts enabled. So if you go 1 to the bottom part of your Zoom task bar -- might 2 3 be at the top for you -- you will see the -- you'll see the CC button or the live transcript button. 4 You can keep it on or turn it off if you don't 5 6 care to watch it, and you can also adjust the font 7 size by using the carrot next to the CC button. You can customize your own view in Zoom 8 9 as well. So where -- we'll be sharing slides in 10 the main panel. You can make everything smaller, 11 bigger, using the view button, which is in the upper 12 right-hand side of your Zoom window. You can tailor it to what you want to see. 13 The webinar is being recorded, and we will post the transcript 14 15 on NOP website as soon as the -- it's available, which is usually a couple of weeks after the 16 17 conclusion of the NOSB meeting. All 18 Jenny, I'm going to turn it over to you to get us 19 officially started. 20 All right. So welcome. DR. TUCKER: And good morning. Good afternoon. 2.1 And good 22 evening. Wherever you are, I know we have folks

1 from across many, many time zones today. 2 you all for being here. My name is Jennifer 3 I'm the Deputy Administrator of the National Organic Program. Welcome to all of our 4 National Organic Standards Board members and our 5 public audience. 6 7 After two successful public webinars last week, I am really glad to be with you these 8 three days. I'd like to again, acknowledge and 9 celebrate our four new board members, Liz Graznak 10 11 from Missouri, Alison Johnson from California, Dr. Dilip Nandwani from Tennessee, and Javier Zamora 12 They started their work on the 13 from California. Board this spring. I'd like to give them all a 14 15 round of a Zoom applause. So if you're at home, you can wave your hands into the camera and that's 16 17 how we applaud on Zoom. 18 So this webinar continues our public meeting that started on April the 19th and runs 19 20 through April 28th. Meeting access information for all meeting segments is posted on the NOSB 2.1

meeting page on the USDA website. Transcripts for

all segments will be posted once completed. 1 2 This meeting, like other meetings of 3 the Natural Organic Standards Board, will be run based on the Federal Advisory Committee Act and 4 the Board's policy and procedures manual. 5 act as the designated federal officer for all 6 7 meeting segments. Let's take a look at the agenda, and I will introduce the NOPT. 8 9 First, the agenda. We are meeting from 5:00 Eastern today, 10 12:00 to tomorrow, 11 Thursday, with an hour break in the middle of each 12 Today, the board chair and secretary will dav. 13 get us started. We'll have two USDA guest speakers to talk about the Department's work on climate 14 smart agriculture. We will follow that with an 15 NOP update, and an NOP, NOSB discussion. 16 17 Then we'll move into subcommittee work, 18 which will extend all the way into Thursday with 19 closing activities and a look ahead. So turning 20 to team introductions, I thank the national organic program team. Michelle Arsenault is our advisory 2.1

board specialist. Michelle, you've now been with

Τ	us in the Board ten years, correct?
2	You're nodding, that's an amazing ten
3	years. So her dedication to this work and to
4	members over ten years makes a real difference in
5	the organic sector. So Michelle, thank you.
6	Let's all give Michelle a huge hand for ten years
7	of service to this board.
8	I am also grateful for the leadership
9	of our standards division director Erin Healy.
10	Erin's leadership has been greatly appreciated as
11	we have added and on-boarded new staff in standards
12	this year, and we've moved a lot of rules ahead.
13	So I've been very grateful to have her in that
14	role.
15	Jared Clark is our national list
16	manager and continues to do amazing work in
17	supporting the world the board, advancing rules
18	quickly, providing endless expertise on a variety
19	of national list questions, and just being an all
20	around really nice person and good guy. So Jared,
21	glad you're here.
22	Andrea Holm is one of our three material

1	specialists in the program, has been doing fabulous
2	work helping us present our work effectively on
3	webinars like this. Andrea is always in the
4	background, getting people promoted in this
5	system, figuring things out, chatting with us on
6	the side, on the things we need to pay attention
7	to.
8	She's also been leading a special
9	project to overhaul our petition substances
10	database. And I believe that's going to be rolled
11	out quickly. But she's really spearheaded that
12	in recent months. And as I think it's going
13	to be a great service once launched.
14	And we have Devon Pattillo, who is
15	currently our acting standards assistant director,
16	and has worked extensively on current livestock
17	roles, as well as many, many other briefing memos
18	and documents. So thank you so much. So big
19	applause to the NOPT. It takes a lot of people
20	to make these meetings happen, and genuinely
21	appreciate all of their support.

Nate Powell-Palm,

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Next,

the Board

1	Chair, will introduce board members. All of these
2	representatives devote hours and hours of
3	volunteer time to serve the organic community.
4	Most have not even met each other face to face yet,
5	and yet are doing wonderful work together. So
6	let's give the Board a full round of applause and
7	appreciation. Thank you, Nate, in advance, for
8	a great meeting. And I now turn it over to you.
9	MR. POWELL-PALM: Thank you, Jenny.
10	Really appreciate it. I think this is one of the
11	more the most fun parts of the meeting is to
12	get to know the board members a little bit. So
13	I'm going to call on folks in alphabetical order.
14	And if you would just give a little bit of
15	background on what you do in the organic industry.
16	If you're a farmer, what you grow. If you're in
17	another sector, kind of how you came to organics,
18	and what your everyday looks like would be great.
19	Also, where are you? What state do you
20	hail from? And I think that gives everyone a
21	little bit of a glimpse into the folks who are
22	serving on the board right now. To get kicked off,

1	we have Amy Bruch, and then Brian Caldwell will
2	be next. So, Amy, please go ahead.
3	MS. BRUCH: All right. Thanks, Nate.
4	Hi, everybody. My name is Amy Bruch. I serve
5	in the farmer's seat for the NOSB. I'm a sixth
6	generation farmer and president of my family
7	farming operation located in east central
8	Nebraska. We grow a variety of different organic
9	row crops organic and transitioned to organic
10	grow crops, including blue and white corn for chips
11	and tortillas, soy beans, small grains, pulses,
12	oil seeds.
13	And in our operation is all irrigated.
14	In addition to my family farm experience, my
15	background is ag engineering. I've had 20 years
16	in various agribusiness opportunities, including
17	food production and farm management, both in
18	several states and overseas as well. Very happy
19	to be here and to be able to serve on the Board.
20	Thank you.
21	MR. POWELL-PALM: Grateful for your
22	service and your time. Brian is going to be next,

1	followed by Jerry.
2	MR. CALDWELL: Hey, everybody. Brian
3	Caldwell. I am serving in a public interest and
4	consumer interest seat on board. Sponsored by
5	NOFA New York the Northeast Organic Farming
6	Association of New York, that helped me get into
7	this august body. And I'm retired from Cornell
8	University, where I did research on organic farming
9	for quite a few years. And I've had a small farm
10	the whole time, even when I was working.
11	And now that I'm retired and I'm kind
12	of focused more on the farm. I can't imagine how
13	I did it all in my spare time back in the past,
14	but I did, somehow. But we've been certified since
15	1986, and started out with vegetables. But now
16	it's pretty much converted all over to fruit and
17	nut crops. We're in central New York state. And
18	I guess that's it. Thank you very much.
19	MR. POWELL-PALM: Thank you, Brian.
20	Appreciate your service to the Board and your
21	insights. Jerry's up next, followed by Carolyn.
22	DR. TUCKER: Jerry, you're muted.

1	MR. D'AMORE: Thank you. May that be
2	the last time today. I was just telling Nate that
3	he had thrown me a monkey wrench because when I
4	was doing the bulk of my owning and operating of
5	production facilities that we didn't have the
6	order.
7	MS. ARSENAULT: Jerry, you're a little
8	faint. I can barely hear you.
9	MR. D'AMORE: I don't know how to fix
10	that unless I just talk up.
11	MR. POWELL-PALM: That better,
12	definitely.
13	MR. D'AMORE: Okay. I thank thank
14	you. I've been involved in the growing and
15	marketing of fruits and vegetables for nearly 50
16	years now. My start was in Saudi Arabia in the
17	mid '70s, where I built and operated hydroponic
18	farms on the Wadi Hanifa. For much of the '80s,
19	I built, owned, operated both NFT and inert medium
20	based hydroponic farms growing local profile
21	crops, and buying crops, primarily tomatoes,
22	peppers, cucumbers, and lettuces.

And at the point where I was doing that, 1 there was not an organic label. That was the point 2 3 that I was trying to make earlier. I then moved Turkey for six years with my family and 4 represented Chiquita in the Black Sea region, 5 including Bulgaria, Romania, Ukraine, and Russia. 6 7 And by the end of the '90s, I settled in California and dedicated much of my time to berry crops for 8 the next 22 years. Thank you very much, pleasure 9 be with all of you, and thanks. 10 11 MR. POWELL-PALM: Thank you, Jerry. 12 Next up we have Carolyn, followed by Rick. 13 Carolyn, please go ahead. Thank you. 14 DR. DIMITRI: I'm Carolyn 15 I'm a professor at New York University. Dimitri. I'm an applied economist. Before I joined the 16 17 NYU faculty, I was an economic researcher at the 18 Economic Research Service of the Department of 19 I sit in a consumer seat, and I have Agriculture. 20 fairly extensive research, applied economic research body on the post farm segment of the 2.1 22 organic sector. And I'm happy to be here. As well

as a consumer of organic food, and a supporter of
organic food, thank you.
3 MR. POWELL-PALM: And those number
4 are important. Your research helps all of u
5 communicate what organic says and what it means
6 So thank you for your work. Next up, we have Rick
7 followed by Liz.
8 MR. GREENWOOD: Okay. Well, hello
9 everyone. Rick Greenwood, I'm in the
10 environmental seat. Long time faculty member a
11 UCLA in environmental health and epidemiology
12 Have been a certified organic avocado grower for
about 15 years in Southern California,
14 medium-size farm, sort of a average for
15 California. But the real problem we face, and I'm
everyone has seen it, is drought. It's really
devastating, in particular, the avocado grow
because they take so much water to grow.
But I came to this because my interes
actually in science based public policy, and I also
did a three-year term on the Haas avocado board
as part of AMS. So happy to be here. Also the

1	longest serving member, and the only member whose
2	actually been to an actual live meeting. So
3	looking forward to getting back to that in when
4	we go up to Northern California. So thank you.
5	MR. POWELL-PALM: Thank you, Rick. We
6	appreciate you being this bridge to everything that
7	is in-person for us. Since yes, we have 14 folks
8	who have never served on the Board at a public
9	meeting, and Rick. All right, next up we have Liz,
10	followed by Kim. Liz, please go ahead. Oh,
11	you're still muted Liz
12	MR. GREENWOOD: How about that?
12 13	MR. GREENWOOD: How about that? MR. POWELL-PALM: Great.
13	MR. POWELL-PALM: Great.
13 14	MR. POWELL-PALM: Great. MS. GRAZNAK: My name is Liz Graznak.
13 14 15	MR. POWELL-PALM: Great. MS. GRAZNAK: My name is Liz Graznak. I am in Central Missouri, and I'm a brand new board
13 14 15 16	MR. POWELL-PALM: Great. MS. GRAZNAK: My name is Liz Graznak. I am in Central Missouri, and I'm a brand new board member, also serving in the environmental
13 14 15 16 17	MR. POWELL-PALM: Great. MS. GRAZNAK: My name is Liz Graznak. I am in Central Missouri, and I'm a brand new board member, also serving in the environmental protection seat. I run and operate a small scale,
13 14 15 16 17	MR. POWELL-PALM: Great. MS. GRAZNAK: My name is Liz Graznak. I am in Central Missouri, and I'm a brand new board member, also serving in the environmental protection seat. I run and operate a small scale, about 11 acres, very highly diversified certified
13 14 15 16 17 18	MR. POWELL-PALM: Great. MS. GRAZNAK: My name is Liz Graznak. I am in Central Missouri, and I'm a brand new board member, also serving in the environmental protection seat. I run and operate a small scale, about 11 acres, very highly diversified certified farm in Missouri. I have a CSA, community

1	first generation farmer. So yeah. That's what
2	I do. I'm a farmer.
3	MR. POWELL-PALM: So we are very
4	excited for your input, and thank you for your
5	service. Next up is Kim, followed by Mindee.
6	MS. HUSEMAN: Good morning from
7	Colorado. My name is Kimberly Huseman. I sit in
8	a handlers seat. I am coming into my third year
9	on the organic board. Got to meet some of my fellow
10	call them classmates at an introduction meeting
11	right before everything went virtual. So very few
12	people have I actually been able to spend time with,
13	and I'm looking forward to our fall meeting in order
14	to shake people's hands.
15	I work for Pilgrims. I have developed
16	and I manage our organic ingredient procurement
17	team. Been with the company for a little over
18	eight years. We're a large scale poultry
19	production, mostly across the Southeast, with
20	specific dedicated organic production in North
21	Carolina.
22	I've previously worked in both the

1	conventional and the organic sectors, whether it
2	be feeding animals, where I also grew up on a large
3	scale farming and ranching operation in southeast
4	Wyoming, where we had about 300 head of cow-calf
5	pairs, row crops, and alfalfa that fed into the
6	dairy market here in northern Colorado. Decided
7	to be on the board for another year, and looking
8	forward to all the things yet to come in the second
9	half of our tenure.
10	MR. POWELL-PALM: I cling to that intro
11	meeting we all had with our class also, because
12	it's our one proof that we're all real.
13	MS. HUSEMAN: That's right.
14	MR. POWELL-PALM: Thank you for your
15	time and service, Kim. Next up we have Mindee,
16	followed by Allison.
17	MS. JEFFERY: Thank you. My name is
18	Mindee Jeffrey. I'm in northern California,
19	serving in the retailer seat. I spent about 20
20	years around different organic retailing
21	environments. Worker-owned co-op, a co-op, a
22	co-op of retailers, but most of that time at Good

Earth Natural Foods in northern California. 1 sort of oddly got lucky in the pandemic in the 2 3 changing of jobs. I was able to move over from doing a 4 lot of organic education in the stores for the 5 consumers and the retailers to running their 6 7 compost program. So I get to spend -- go three days a week in the stores and come back to the farm 8 9 and learn about nutrients, and inputs, and row 10 So I'm super excited to be on the board. crops. 11 And I spent five years on the California Organic 12 Products Advisory Committee, which really taught me a lot about how to listen to all sectors of the 13 organic stakeholder community, and really learned 14 15 a lot in that environment, really helping me in 16 this environment. So thank you. 17 MR. POWELL-PALM: Thank you so much. 18 Your voice is invaluable. So thank you for your 19 time and service. Next up, we have Allison, 20 followed by Dilip. 21 MS. JOHNSON: Ηi everyone. I'm Allison Johnson. 22 I'm in the public interest

based 1 consumer seat, and Ι'm in Oakland, I've spent my career in sustainable 2 California. 3 food systems kind of broadly, and I started in organic as a handling certifier at CCOF, back in 4 my hometown of Santa Cruz, California. 5 And after a few years there, kind of surveying the landscape 6 7 and the challenges that our members face, I decided to go to law school to learn legalese and figure 8 out how to wrangle our policy beast to better 9 support all the people who I was interacting with 10 11 every day. 12 So I currently work at the Natural Resources Defense Counsel tending to do policy 13 14 advocacy, and change our policies to support 15 organic and sustainable agriculture. I'm not a farmer, but a plant enthusiast, and I'm about to 16 17 put in my first fruit trees ever. So I'm verv 18 excited about that, and happy to be here with you 19 all. 20 MR. POWELL-PALM: Thank you for your service, we really appreciate your 2.1 time and 22 insights. And you're about to be a farmer, so get

ready for that crown. Once that's -- once those 1 2 fruit trees go in. Next step, we've got Dilip 3 followed by by Logan. DR. NANDWANI: Good morning. My name 4 is Dilip Nandwani. I'm a professor at Tennessee 5 State University and I do research, extension, and 6 7 teaching in organic agriculture. My primary responsibility is to work with small farmers. 8 So 9 the research I've been doing in organic vegetable production and the fruits, as well as training to 10 11 the farmers on organic certification process and 12 regulations since almost ten years here in 13 Tennessee. I'm based in Nashville, and we do have 14 15 a certified organic farm for research, education, and extension purpose where students, they come 16 17 and do their research projects. And farmers, they 18 come, producers, they come a small farm expo, and 19 lot of things that extension events we do at the As well as I teach a small kind of a course 20 farm.

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on organic agriculture principles.

organic agriculture

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So

sustainable

far,

agriculture. And I have a few books on organic 1 sustainable agriculture, and all 2 agriculture, that. 3 Prior to Tennessee, I was in the US 4 Virgin Islands, beautiful island, where I was also 5 6 teaching horticulture and organic agriculture. I've been working with minority growers in Virgin 7 Islands and here in Tennessee. And prior to Virgin 8 9 Islands, I was in American Pacific or Micronesia. Only few people didn't know that we have a land 10 11 grant college in American Pacific. So those are 12 beautiful islands, I spent almost 10 years there. Even before this organic seal came into existence 13 in '90s, I spend there. 14 15 I'm serving Organic on Tennessee 16 Growers Association, we call it TOGA board, as well 17 as Southern Cover Crops Council board, SCCC, which 18 is a regional board. I'm in Southern Nashville, 19 so located in southern here in Tennessee. My 20 primary research, as I mentioned, fruits vegetables, basically production issues, dealing 2.1 22 and helping farmers.

I do serve on the chair on Organic World 1 Group and International Society of Horticultural 2 3 Science, on subtropical and tropical fruits, which I just give up as soon as I got on NOSB. And also, I served as a chair for organic horticulture in 5 American Society for Horticultural Science. 6 glad to be here, very honored. 7 Thank you. MR. POWELL-PALM: It's with no small 8 amount of pleasure that we get to say -- when we 9 have a question for Dilip, he literally wrote the 10 11 book on it. So we're really grateful for your time 12 and expertise. Next up, we have Logan Petrey, followed by Kyla Smith. 13 Hi, I'm Logan Petrey. 14 MS. PETREY: 15 I'm in the farmer seat, fourth generation farmer as conventional farmers go, so I'm first generation 16 17 with organics. I currently am a farm manager for 18 Grimmway Farms in the southeast. It's their only 19 operation here, and we're actually in north 20 Florida. And just to echo Rick's statement about the water crisis that could be in California. 2.1 So 22 Grimmway is looking to go in other regions and we

1	are we're here. We're trying it out. It's very
2	different from California, for lots of different
3	reasons.
4	But we our main crop here is carrots.
5	That's what carrots supply. I didn't know that,
6	until I got Grimmway. We grow different produce
7	from where I grew up, but and so among the care,
8	it's of course organic. You have a lot of
9	different rotational crops, including other veg
10	items, corn, soybeans, peanuts, beans, you know,
11	those things. And so again, trying to figure this
12	out, and excited to be here and to represent
13	Grimmway, which is one of the largest organic
14	vegetable growers in the country. So thank you.
15	MR. POWELL-PALM: Thank you so much,
16	Logan. We're really grateful to have your voice
17	on this board. So thank you for your time and
18	service. Next up, we have Kyla Smith, followed
19	by Wood.
20	MS. SMITH: Thanks, Nate. Hi,
21	everybody, my name is Kyla Smith. I'm serving in
22	the certifier seat. My day job is has me

that I've been working with Pennsylvania Certified 1 Organic, which is a USDA accredited certifier, 2 3 based in Pennsylvania, but we certify across the US, but mostly up and down the East Coast. 4 currently serving in the certification director 5 role there, but I've done almost every job. 6 like I -- it's what I like to say. 7 I've done inspection, policy work, review work, and I've been 8 in certification for almost 20 years. 9 And I look forward to going to an 10 11 in-person meeting for sure, because I've been a 12 long time NOSB groupie, and so have attended lots of meetings over the year, but on the other side 13 of the table. So I look forward to being with you 14 15 all in Sacramento. And I'm just, yeah, excited to be working with Nate and Mindee in the leadership 16 of the Board, as I'm serving in the secretary role 17 18 currently, and it's been super fun. 19 I'm just hoping to bring the And 20 certifier voice into these conversations, as we're the ones that have to sort of figure all -- most 2.1 22 of these things out, all the rules and how they

actually apply, boots on the ground. So sort of 1 that conduit between the producer and the program. 2 3 And so we aim for consistency. I'm a cross certifier, and so the work that the Board does is 4 super important to try to inch that needle towards 5 consistency everyday. So thanks for allowing me 6 7 this honor of being in this role. It's fun. MR. POWELL-PALM: The honor's ours. 8 9 Thank you for stepping up and serving as -- in the secretary seat, but also on the board. You -- your 10 voice 11 is incredibly valuable, and we really 12 appreciate your time. Next up is Wood, followed 13 by Javier. 14 MR. TURNER: Hey, everyone. I'm Wood 15 Turner, and I'm also thrilled to be in my third year of this kind of unique public service that 16 17 call the NOSB. It's been an incredible 18 experience for me so far. I am the head of Global 19 Impact for environmental and social impact first 20 for agriculture capital, and I'm based in Berkeley, We're a grower, packer, shipper of 2.1 California. 22 blueberries, hazelnuts, citrus, and table grapes,

1	specifically. And relevant to this work is our
2	roles in organic blueberry and table grapes
3	producer.
4	I'm trained as an environmental planner
5	and designer. I grew up in rural North Carolina,
6	but I spent my career in Washington State, New
7	Hampshire, and California. Focused on and spent
8	my career 30 years goes by really fast, really
9	30 years focused on sustainability, spanning
LO	the non-profit consulting and then more recently
L1	with building purpose driven brands.
12	I previously to joining agriculture
13	capital and moved to California, I was in New
L 4	Hampshire leading sustainability of personal farm.
15	So have experience in permanent crops, but also
L 6	in the dairy world. And I'll try my best to bring
L 7	that experience today on this work every day. So
L 8	thanks.
L 9	MR. POWELL-PALM: We really appreciate
20	your time and input. I think as part of our
21	Kim, and my, and Wood's original class, I really
22	am grateful that I got to meet you in person and

excited to see you again in the fall. Lastly, is 1 going to be Javier, and then I will finish us out. 2 3 MR. ZAMORA: Hi, good morning to all Javier Buenos dias. Zamora 4 of vou. beautiful Wattsonville. 5 This is my ten. That's 6 farming, not really Cancun. This is truly an honor 7 for me to be on the farmer's seat for the NOSB. Τ am a first generation farmer in America, 8 9 probably fourth generation coming out of Mexico, 10 from my parents. 11 strawberries, raspberries, grow 12 vegetables, flowers, all certified organic through CCOF here in beautiful Santa Cruz. And it's --13 I'm bringing just the experience of boots on the 14 15 ground on a daily basis. I was actually moving 16 boxes this morning before I came in the office to 17 be in front of you. My hope is that I can represent 18 the small mid-size grower, especially the Latino 19 farmers that are -- they need a little more help 20 bridging the gap that exist these days among the farming communities, especially organic. Muchas 2.1 22 gracias.

1	MR. POWELL-PALM: And thank you for
2	your time and contributions, Javier. I think
3	every time I get the chance to reflect on our board,
4	I always come back to how incredible it is. The
5	expertise that we all bring, and how rich the
6	dialogues are that we have. And from farmers,
7	actually in the field, jumping on calls from the
8	cell phone myself being one of those to folks,
9	who can really bring the insights into how we can
10	prove this incredible movement that we're all part
11	of.
12	I sit in real gratitude to you-all.
13	So my name is Nate Powell-Palm. I'm based out in
14	Bozeman, Montana, and behind me is my last year's
15	crop of field peas. We raise yellow peas, and
16	flax, and durham, as well as beef cattle and
17	forages. For about ten years, I've also served
18	as an organic inspector, inspecting in about 41
19	states, doing a little more than 3,000 inspections
20	around the country.
21	And there's been moments as a farmer
22	and as an inspector that I really appreciate folks

like Kyla keeping this whole band wagon together 1 as a certifier, because it is a heavy lift. 2 3 we dive in today, I think that there's a lot of really great things for reflect upon, which I'll 4 save for in just a bit. 5 But I wanted to just express my most sincere gratitude to my fellow 6 7 board members. It's a volunteer position. Everyone 8 9 shows up with all of their expertise and hard work, and I can't think of -- I don't think I'll ever 10 11 have a greater honor than the chance to serve on 12 this board with this group. So really grateful 13 that we get to do it together. And with that, we 14 are going to toss it over to Kyla for the 15 secretary's report. Thanks, Nate. 16 The minutes MS. SMITH: 17 were provided to all the board members well ahead 18 of the meeting for review. And so asking now, do 19 you have -- or do you accept the meeting minutes 20 from October 2021 of the NOSB meeting as they are written, or are there any corrections? I see no 2.1

So with that, we can call the minutes

corrections.

Thank you.

from the October 2021 NOSB meeting approved, and
I will hand it back to you, Nate.

MR. POWELL-PALM:

doing great on timing, wow, right to the minute.

So I -- I'm always grateful for the chair's report opportunity. I was thinking back to my predecessor's really insightful report on how we're doing as a board, but ultimately, where we need to go to harness this incredible movement that we're all part of. So as I was thinking about what I'd like to share with you all about the state of the board and about my vision that I hope we're able to see come to fruition.

A little bit of background on my experience with organics. So I somehow convinced my parents when I was 12 that they should buy me three bred cows so that I could be a rancher. And while they said, we don't have the money to buy them for you, you can go out and get a loan to buy them yourself. And somehow the Montana Department of Agriculture said, sure, we'll give a 12-year-old a loan. And that's, I think, an example of

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So I was able to get this loan that 2 3 allowed me to buy three bred cows and start my small cow-calf operation. We really quickly -- I 4 learned that three bred cows was not going to make 5 a career, even for a 12-year-old at the time. 6 7 I needed to figure out where is there more value. Where is there a way that I could be realizing 8 9 more value for the products, the food that I'm 10 creating. 11 And so I got hooked up into the the world 12 of organic through a couple of ladies, about an hour from me, who made organic chicken feed. 13 they introduced me to this world that folks just 14 15 do things differently. They take care of each 16 other differently. They take care of the land 17 differently. And so building on that, I've been 18 able to ultimately realize this career in agriculture that I was always a little shaky on 19 20 if it would actually come to be. 2.1 While doing that in building ΜV 22 operation, I had the chance to see a lot of

government working really well.

operations in action as an organic inspector. And so for 10 years, I saw this promise of organic lived out in factories and on farms across America. What does organic food mean for everybody? And I think when I look at how lucky I've been to be able to start a first generation operation that provides a living for myself, that's something that I've tried to figure out.

What is it that makes it possible for me to pass this on, to not only the next generation, but the next five years? How do we keep this going in a way that folks like myself can realize these opportunities? First generation farmers. historically disadvantaged farmers. How do we make it so that organic is this vehicle to creating a world of agriculture that we also believed in? When I first got the call from Jenny saying that I had been appointed to the Board, one thing that immediately popped into my mind was, maybe this isn't such a good idea to serve. Tt.'s a big deal, it's a big job, but it's also pretty contentious. You know, I've heard nothing but the

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stories of board members being like, oh, man. 1 don't know why I did this. This is a lot of work. 2 This is not a lot of love for -- from the community 3 when it comes to making these hard decisions. 4 And so I went into my service with that 5 in the back of my mind, how do we ultimately realize 6 7 the potential of this board? And I think I realized it over the course of these three years 8 so far through incredible collaboration. 9 don't know if I've just lucked out and my fellow 10 11 board members are folks who look around every day 12 and say, how do we really take the opportunity we've been given as members and as leaders of the organic 13 community, and make some change? 14 15 And so again, I thank all of you, my fellow board members, for the incredible hard work 16 that you've put in making this beast happen. 17 18 we look at the potential of organics and the potential of this collaboration, I also look around 19 to our place in fighting climate change. 20 consider the potential that organic has to be the 2.1 22 climate smart solution, we're really looking at

26,000 certified operations and many thousand 1 more, who are potentially transiting to organic, 2 3 as folks who have in their own power in the soil beneath their feet, in the practices they use on 4 the farm, the potential to really scale up a real 5 meaningful fight against climate change. 6 7 And I think one thing when I look around -- and I realize I'm on the younger side of board 8 But when I look around, I do think we have 9 very little time. We don't have time to be ever 10 11 fighting amongst ourselves. We don't have time 12 to be doing anything but looking really straight ahead, figuring out where is the collaboration and 13 where is the opportunity to pull together towards 14 15 this shared vision -- the shared, hopeful future 16 reality. And I think we're doing that on NOSB 17

And I think we're doing that on NOSB right now, which is why every time I call into one of our subcommittee calls, I'm really excited. I think in the past year, we've had a lot of new members come on and each one of those members has, I think exceeded everyone's expectations for how

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2	And what we can realize as a team.
3	And I think that we'll see over the next
4	few days that we are crushing it. There is a lot
5	of hard work, hard decisions being made, and folks
6	are bringing their very best writing, their very
7	best debates to this discussion. When looking
8	back at the fall meeting, I think an example of
9	our deep and really healthy collaboration was the
10	vote on ammonia extracts, that we were able to have
11	a tough debate and really hear all sides and have
12	folks walk away feeling like, we were heard, and
13	this is nothing but an opportunity to grow.
14	We were able to have something that I
15	thought was, you know, possibly a point of fissure
16	for the community, ultimately get worked out, get
17	voted upon, realized fairly good unanimity, and
18	leave each other still texting each other high
19	fives. That this is still something we all want
20	to be a part of. This is still something that is
21	meaningful to all of us.
22	So I think when we talk about what we

much better we can get with every single new member.

perceive as existential crises in organic, I think we all want to remember that this is still so worth protecting. No matter how hard the debates, no matter what we deem our wins or our losses, the movements, the creation of the organic standards is something we can all agree upon is worth fighting for and worth defending, and ultimately worth all of our time and our expertise.

So as we move in today, we're going to have a lot of discussions about how we improve organics, and we're going to have some really great debates about where we think it should go. But at the end of the day, I am really grateful to you all, my fellow board members, for taking such an exceptional professional approach to this work and making it so that we all feel safe, we all feel heard, and, especially we feel like we're doing the best we can to make meaningful change. So I realize I'm a little bit ahead of schedule, but with that, I would like to hand it back to Dr. Tucker.

DR. TUCKER: Nate, thank you so, so

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much for those comments, and thank you to all the 1 Yeah. Let's give Nate a round of 2 board members. 3 applause. Thank you, Jerry. Very, very, very nicely put. And a true honor to work with all of 4 I'm so glad we take the time to do the board 5 6 introductions at the beginning of this process. It is an exercise in democracy, but also for me, 7 humility of seeing the backgrounds of this board 8 and the talent that you bring to the table, so thank 9 10 you very, very much. 11 And Nate, I'm really glad that you 12 talked a bit about climate and climate smart The first part of the NOP update here 13 agriculture. is going to be listening to a couple of folks from 14 15 USDA talk about climate smart agriculture. So I can see a flurry of activity in the background. 16 We're trying to get the first speaker on, and so 17 18 Sean Babington will be joining us, hopefully in 19 just a second here. He is the -- a senior climate 20 advisor for USDA and is in very, very high demand across the department, so we're giving him a couple 2.1 22 of minutes to log in.

1	MR. BABINGTON: I'm here.
2	DR. TUCKER: Yeah. Okay. So let me
3	give the formal introduction then for Sean, it's
4	great to have you here. Sean is the USDA senior
5	climate advisor. He works to help farmers and
6	ranchers address the challenges they face as a
7	result of climate change. He works across
8	multiple mission areas within USDA, hence making
9	him a very busy guy, to find solutions that help
10	operations adapt, become more resilient, and
11	mitigate problems.
12	Sean previously handled committee
13	business pertaining to forestry, pesticides, and
14	climate change for the US Senate Committee or
15	Agriculture, Nutrition, and Forestry. He also
16	served as a senior policy advisor for Energy and
17	Natural Resources, and is an adjunct lecturer for
18	Georgetown University's environmental studies
19	program. So John or Sean, we're so grateful
20	to have you here today. Welcome to the NOSE
21	meeting.

BABINGTON:

MR.

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Jennifer.

Thanks,

It's really great to be here and I appreciate the

-- the kind introduction and -- and the invitation

to spend a few minutes with you all. So I was

thinking, I'm just going to give sort of a handful

of minutes on sort of how, from my perspective of

the department, you know, USDA wide sort of

approaching climate smart agriculture.

And, you know, with a little bit more attention paid to how organic systems fit into that, and, you know, maybe talk a little bit about some of our work going forward that we're carrying forward across mission areas. Obviously, many folks are familiar with our partnerships for climate smart commodities program, which I'll talk a little bit about. But also want to talk about some of our other work.

And then just sort of, you know, I'll close and note that there might be a little bit of a statement or some feedback that folks want to share with me. But more than anything, just thank you. Appreciate your collaboration. I see, just scrolling through really quickly, some

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old friends here I spent a dozen plus years on the 1 hill most recently, as Jennifer mentioned, working 2 3 for Chairwoman Stabenow. And it's great to be back in touch with folks and have these opportunities. 4 So I think, you know, I'll start out 5 sort of macro level, you know, broadly speaking, 6 you all know this agriculture, forestry rural 7 America are actually uniquely affected by a warming 8 climate, and climate change, and the impacts that 9 we're seeing. But also uniquely positioned to 10 11 really be a meaningful part of the solution here 12 to help on the mitigation side. right 13 And with the policies and incentives, us in the secretary's office and across 14 USDA, Ι think we feel that climate 15 agriculture, forestry sort of rural clean energy 16 solutions that the department can help promote, 17 18 really create -- both can new new revenue 19 opportunities for producers, but also just strengthen rural communities that we're really 20 thinking about all the time at the department here. 2.1 22 You know, one thing that the secretary

I think is particularly eloquent on, is, you know, 1 it's not just an opportunity to think about 2 3 additional revenue opportunities, but it's also an opportunity to think about sort of flipping the 4 traditional energy and sort of climate discussion 5 6 on its head a little bit. Right now, we see, you 7 know, a lot of the resources, and the energy, and excitement, and the investment on the coasts and 8 in urban centers. 9

And historically, we've seen natural resources, whether they be fossil fuels, or fiber, or whatever taken off the land, taken from rural areas, shipped to urban areas to see that value-add happen outside of those rural communities that the raw materials were derived from. And I think that this notion of how do we drive climate smart production, climate smart commodities, and the value-add that we can drive there, can help with some of that reinvestment in rural communities that we all care about so much.

So the department, you know, the Biden-Harris USDA under Secretary Vilsack's

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leadership has really embarked upon an across the department effort on climate. We're thinking not just about traditional conservation programs and traditional farmer facing programs, but really everything that we do. We're looking at policies that are voluntary, flexible, led by producers.

As you all know, if the policies we're promoting don't work for producers, they're not going to work for the climate, right? We need to meet folks where they're at and think about this from grassroots bottom-up, rather than a top-down approach. And all along the way and everything we're doing in climate, we're thinking about scientific and rigorous monitoring, greenhouse gas accounting. Those are some of our north stars, right? We need to make sure that we're checking our math and that we're thinking about this in a very science based way.

And while we're doing that, we want to make sure that everyone has an opportunity to benefit here. We're not just talking about large row crops in the Midwest, right? We're talking

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about small and medium size farmers, organic 1 2 production systems, conventional, large and small 3 specialty crops. And really the diversity not just of crops and regions that USDA serves, but 4 the diversity of producers. 5 Underserved and folks that have --6 historically USDA had not done a terribly good job 7 of serving are a really meaningful part of how we 8 think about climate. So we're really excited 9 about all this. I've mentioned that we're not just 10 thinking 11 about, traditional you know, our 12 conservation programs or just working through We're thinking about our research agencies. 13 NRCS. 14 We're thinking about international opportunities. 15 Some folks may know that the secretary 16 launched the agricultural innovation mission for 17 18 climate last year, and we have many partners across 19 the globe who are really thinking about, how do redouble that investment in agricultural 20 we research and innovation that can drive a lot of 2.1 22 these practices that we want to see on the ground?

We joined something called the Global Methane
Pledge, which is a really important part of all
this climate work. Folks think about carbon as
the only thing we're thinking about here. But when
we talk about ag, we think about methane and nitrous
oxide and there's a really important body work
going on there.

As many of you know, the USDA is home to the Forest Service. We've got a robust body of work happening over with our friends at the Forest Service, some of you may have seen that the President Biden signed an executive order last Friday on Earth Day for -pertaining to strengthening our forests, including looking at how we preserve our -- some of our most carbon-rich Our old-growth and mature stands across our National Forest System, but also just across the country.

So there's a big body work going there.

And then we do get to our traditional conservation programs administered by NRCS and FSA, and thinking about how we can really orient and point those

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1 towards climate smart outcomes in a way that is, 2 again, based on existing relationships 3 existing body of work. And then what I alluded to earlier, the partnerships for climate smart 4 5 commodities program. As many folks know, and there's been 6 a fair amount of interest in this, certainly a ton 7 of interest and even a lot written about it, but 8 secretary in February, went to Lincoln 9 the University of Missouri in Jefferson City, Missouri 10 11 and 1890s HBCU, and announced this \$1 billion 12 partnership for climate smart commodities program. We are right now, accepting applications for this 13 The first deadline is coming up at the 14 program. 15 end of next week, May 6. And we're really looking to provide 16 17 targeted grant funding to meet the national and 18 global demand for climate smart commodities, and 19 expanding the market for these commodities. We 20 think that there is an important role for USDA to

play in developing this new market. And while

we're thinking about applications for this, we're

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1	really looking at folks to show their math. I
2	mentioned this a little earlier, but monitoring
3	verification, reporting is going to be a very
4	important part of it.
5	And it's a very flexible program,
6	right? We've got a wide range of public and
7	private entities, farm groups, states,
8	non-profits, businesses, tribal governments,
9	higher education institutions, right? Our land
10	grant universities, all eligible to apply. And
11	we really, I want to emphasize this, see organic
12	producers being an important part of both this
13	program and our broader climate work, and hope that
14	you all see yourselves in this broader work.
15	There are so many great lessons and
16	tools, you know, and so many people on this call
17	and across the broader community. Just such
18	leaders in sustainable agriculture, and
19	cultivating those tools and that expertise that
20	can really, really benefit us in this broader
21	climate discussion that we're having right now.
22	So, you know, a few specifics and I know

you won't know this. I just want to say it out 1 Some of the things that organic does best 2 3 that organics, you know, it's part of the program, Improving water quality and minimizing 4 right? 5 erosion; crop rotations and cover cropping to 6 promote ecological balance and conserve bio 7 diversity; a whole host of things that you all are such experts in on improving soil health, which 8 in turn stores more carbon. 9

> all Those critical. critical are knowledge bases and sets of practices for us as we think about the Department's work on climate and how to scale up some of this climate smart agriculture work across the country. So again, I just wanted to say one, thank you again for having We at the department feel that organic me. producers are a really critical part of this discussion, and really have such expertise we're really, frankly, going to need as we move forward on this.

So we're really looking forward to continuing to work with you-all. Our colleagues,

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certainly at the National Organic Program, but the 1 Board and others in this space. Learning from 2 3 you-all and moving forward together on this really important climate discussion. 4 Jennifer, unless I missed anything, I 5 think I'll wrap it up and just, again, say thank 6 Again, great to see some friends on the 7 If you're ever in the Whitten 8 screen here. Building, please stop by, darken my door here, and 9 I'll wrap it up and let you all continue with your 10 11 meeting. 12 DR. TUCKER: Sean, thank you so much. We would like to give the board chair just an 13 opportunity to say a couple of words back that the 14 15 board is really engaged in, in the climate agriculture 16 agriculture climate smart 17 discussion. So, Nate, you want to take the mic 18 for a couple of minutes here. 19 MR. POWELL-PALM: Sure. Sean, thank 20 you so much for joining us today. This is really -- is a meaningful connection for us all to have 21 22 this conversation in one spot. So really want to

say, thank you for your time. I was just so stoked 1 when we saw the announcement for the \$1 billion 2 3 for climate smart commodities. One thing that I would -- I -- in reading the text, it sounds like the goal of the program is to ultimately identify 5 6 those practices that are climate smart, but then 7 help us foster a marketplace so that producers can ultimately realize a private market solution to 8 making sure that they can get a premium for climate 9 smart commodities. 10 11 As we roll through some of the more 12 specifics that we're looking at at practices, like nitrogen usage that you mentioned, reducing NOx, 13 and soil carbon sequestration. 14 I think that 15 there's been sort of an underselling of organics as far as what we can bring to the table, having 16 already created this marketplace that rewards 17 18 farmers for these practices. 19 So when we look at NOx, I know that 20 there's a lot of precision agriculture trying to figure out how do we reduce it and use it, right? 2.1 22 Organics doesn't use it at all. And so when we

think about how quickly we can make these strides, 1 looking to organic as a leader on nutrient 2 3 management, because we are only using those inputs that are available on farm, or select inputs off 4 In looking at tillage, oftentimes soil --5 organic gets kind of a bum rap for tillage. 6 7 But when we look at the entire rotation, oftentimes, organic tilling 8 is less t.han conventional, because we usually have a perennial 9 phase in the rotation, where we're able to realize 10 11 several years without any steel in the ground. 12 Manure management, we have inspectors on the ground monitoring for manure voluntarily from producers 13 opting to be certified organic. 14 15 So I think the biggest thing that we're wondering about and hoping to engage on is how do 16 17 we have USDA recognized organic as a climate smart 18 practice. That seal being married right away to 19 that claim that companies who are looking to invest in ESG and companies trying to figure out where 20 do I put my climate smart supply chain efforts, 2.1 22 my investment dollars.

I think we're at sort of shaky spot 1 right now because a lot of practices that are 2 3 inherent to organic are being elevated, celebrated as a cover crops, NOx reduction. But all of that 4 is already existing in organics, and we already 5 6 have a marketplace. So we need to put some numbers I realize that, and that's 7 behind organics. definitely the goal of engaging in the \$1 billion 8 9 for climate smart solutions. But on a broader base, I was wondering 10 11 if you had any input on how we could better message 12 that we've got five percent of the food market already signed up, ready to go in this marketplace 13 that has all the infrastructure built. 14 15 consumer confidence, we have a regulatory system, we have deep public investments, and it seems like 16 it's a right fit for what this Climate Smart 17 18 Commodities Program is looking to do. 19 So is there a way we can see organic 20 as a fire to which we need to just add gas to try to get it bigger and bigger. And I realize with 2.1 22 climate change, we do not have any time for us

them. not 1 versus This is organic versus 2 conventional. It's just hoping that we might be 3 we'll say, here's one example of everything being done right. And if you-all want to copy, that's 4 If we want to add, you know, the confidence 5 that USDA acknowledging organic as climate smart 6 solution would really help companies invest and 7 grow this market that we know has pretty solid legs. 8 9 MR. BABINGTON: Yeah, thanks, Nate. 10 And I really, one, just appreciate the perspective 11 and sort of the candor, but also the constructive 12 approach that you just took in all of that. I think it isn't us versus them, right? It's too important 13 of an issue, and it's too urgent to say it's not 14 organic or conventional. It's not big mess --15 Midwestern row crops versus specialty crops in 16 California. It's got to be all of us, and we got 17 to move forward together on this stuff. 18 19 I do think to your point about, you 20 know, how can we kind of, you know, elevate the discussions surrounding the good stewards that 2.1 22 organic have been for a long time and what they bring to this climate discussion. This type of
dialogue, this kind of meeting, I know there was
a -- an exchange between the program, National
Organic Program and the Standards Board month
before last about kind of, you know, some of those
synergies that we can just talk more about, because
there is such a great story to tell here.

And I think that, you know, you have my commitment certainly to continue to engage with you all to to tell that story. The specific question about sort of how do we match up seals and certifications and stuff. That one's a little bit funny, right? And we need to get into that and figure that out. And we've got process verified and all sorts of other things, but we're committed to having it, and this is just such a group of leaders, you know, really in this kind of sustainable agriculture that, you know, was started before we were thinking necessarily about climate but there's dovetail so well with this exact discussion.

So I think, you know, I would love to

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hopefully seeing a lot of participation in the 2 3 partnerships program. As I mentioned, the first big deadline is next week. But, you know, when 4 we think about that program, we are hoping to learn 5 so much about what's out there, who can show their 6 7 math, who's got, you know, the MMRV -- measurement, monitoring, reporting, verification --8 behind their proposals, and then allow us to learn an awful 9 lot about that as we take our next steps. 10 11 As the department working with Congress 12 on the 2023 Farm Bill, et cetera, this will be the first one since 2014 that I'm not on the hill for, 13 and I look forward to not being there for those 14 15 really late nights. But I'm a little sad to miss out on what is a really exciting process, I think, 16 for all of agriculture. 17 So anyway, I really 18 appreciate the sentiments. I appreciate the 19 opportunity with you-all, and certainly to have 20 a constructive dialogue going forward. MR. 21 POWELL-PALM: Thank you. We 22 cannot thank you enough for your time, and really

just keep the dialogue going, and look forward to

1	appreciate you coming today.
2	DR. TUCKER: Thank you, Sean, very,
3	very, very much. Let's give another round of
4	applause. Really appreciate your time and being
5	here. Thank you. Thank you. Thank you for all
6	that you're doing, and for being with us today.
7	So thank you.
8	MR. BABINGTON: All right. Great to
9	see you-all. Enjoy the rest of the meeting.
10	DR. TUCKER: Okay. Be well. I'm now
11	going to turn it over to our second USDA climate
12	speaker. This is Adam Chambers. So Adam, I see
13	you are on with us. Thank you. So Adam is with
14	NRCS, Natural Resources Conservation Service. He
15	is the scientific lead for environmental markets.
16	And so we've had some great conversation leading
17	into this meeting.
18	His team focuses on leveraging markets
19	that value ecosystem services, building strategic
20	partnerships and getting more conservation on the
21	ground. And so his work is supported by NRCS Farm
22	Bill programs, and works to increase voluntary

conservation practices on working agricultural lands in the United States. 2 3 And so Dr. Chambers' project work has focused on the applied sciences, reducing air 4 5 pollutants and greenhouse gases, and providing a merging carbon market opportunities for US land 6 7 owners and agricultural producers. And so Adam, thank you so, so much for being here, taking the 8 9 time to be with us. And we turn the floor to you. 10 DR. CHAMBERS: thank Hey, you, 11 I look forward to the day that we're everyone. 12 all in the same room again. I just cannot wait. 13 Thank you, Dr. Tucker. And thank you, Mr. Babington, for giving the great introduction. 14 15 I'll try to take us maybe a step on down the quantification path. And made -- I'll try to touch 16 a little bit on that challenging quantification 17 18 piece that you touched on with nitrous oxide as 19 That's always -- that can always be quite, well. 20 quite challenging. I was going to just try to share my 21 22 screen and go through a quick few slides so that

we can all kind of work off of a common denominator 1 if you might. And it's relevant -- so rather than 2 3 you having to see me, we can show some slides. So I think you can see slides maybe if I can get 4 5 a thumbs up from somebody or -- there we go, one 6 more step to go. 7 So yeah, I'm Adam Chambers. I work for NRCS, and I've worked for NRCS for guite a while. 8 9 I work on conservation practices. So voluntary 10 conservation practices, delivering greenhouse gas 11 mitigation benefits, as kind of what Nate talked 12 about, and carbon sequestration benefits. what I want to do is talk about the -- everything 13 that Nate touched on, which is Adam Chambers works 14 15 in the -- yes, I agree with you wholeheartedly, now, let's put the quantification to work and prove 16 17 that in the numbers. 18 And then can we put the numbers forward 19 that justify our scientific assertions that we 20 make, or the -- the -- the, you know, kind of the I mean, I really trust in humanity and our 2.1 hunch. 22 intuition, but I also like to work with numbers

and see the quantification. 1 So as we all know -and I think this was really highlighted with Mr. 2 3 Babington 's overview, and Dr. Tucker as well. We are the first generation to fully understand 4 this problem of climate change, and we're the last 5 with the ability to solve it. 6 7 These aren't my words. I'm borrowing them from other climate scientists, but this --8 we got to be all in it. We -- all in it, all 9 10 together, right? And this is our opportunity for 11 the folks who were -- who are inhabiting the top 12 of the earth. At this time, we understand it. We understand how to solve for it. And now we got 13 14 to get to work. 15 We know that working lands agriculture can deliver. We know that forestry can deliver. 16 We know that industry can deliver. 17 We know that 18 every sector has to be involved, and as 19 it's full Babington mentioned, а sector 20 prioritization. And we're trying to reduce the carbon footprint across all sectors through -- and 2.1 in NRCS, we have voluntary, real, quantifiable, 22

atmospheric benefits that -- these are called climate solutions.

But then in parallel, we have to produce the food, the fiber, and the fuel that we need for the world. So I hope that you all will see yourselves in all the slides here. And I really want to kind of put an exclamation point on that, because it's inclusive. This is an everybody on board. We also know -- here's another climate If you look at the left, we've change overview. got carbon sequestration and greenhouse mitigation. If we can increase this now, we can reduce the cost of adaptation and resilience in the future.

know, if don't also we make talked about investments now, as we these challenging gases, they live in the atmosphere for decades. In the case of methane, for centuries. In the case of CO2, for almost millennia. And when we start talking about some of the more potent greenhouse gases, and those will be around for a long time. So that means we have more investment

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2 So anything we can do to keep the gases 3 out of the atmosphere, or work with that carbon cycle and bring them back to the atmosphere. 4 again, bringing you into this picture, we have a 5 whole -- this is from a peer over on the comment 6 team at Colorado State, Amy Swan, and it was also 7 published in the Intergovernmental Panel 8 Climate Change 2006. We know there are lots of 9 sources and lots of sinks on all operations. 10 11 And so then the question is: Can we 12 track all of these different gases and look at how did they quantify, and then how do they stuck up, 13 right? Are there net benefits to the atmosphere? 14 15 Or are there net losses to the atmosphere? know that just about everything in production 16 causes emissions. But we also know that we can 17 18 work with the nitrogen and carbon cycles to bring 19 things back into the planet. 20 So we've got three main greenhouse gases, this -- if there was a quiz today, it would 2.1 22 be carbon dioxide, nitrous oxide, which is also

in the future in our resilience adaptation.

laughing gas, and it's a persistent gas that stays 1 in the atmosphere, and methane, CH4, which does 2 3 decay over time to become carbon dioxide. that's the end of the chemistry for today. 4 just kind of have fun and talk about being part 5 of the climate solution. 6 7 But there are a lot of sources, a lot of within any agricultural 8 sinks operation, including organic operations, 9 and there 10 numerous intervention opportunities. We all know i f 11 that we make the intervention can 12 opportunities, some of them are technology driven, some of them are practiced and management-driven, 13 and some things we just cannot change for the time 14 15 being. 16 At NRCS, we work with systems, and this is an extreme egregious case, but we work with 17 18 systems like this. I see an atmospheric problem, 19 I see a water quality problem, I see a soil problem, 20 soil health. But we try to transition those systems into more sustainable, more operational 21

And we know, of course, within soil

systems.

health, with soil organic matter, we can build 1 carbon stocks, and we can protect our most valuable 2 3 resource, which is topsoil, right? We all agree on that. 4 We've 5 livestock operations -- same thing, egregious, but 6 we know we can go to livestock health, soil health, of co-benefits 7 sustainability, have bunch а associated with all these climate benefits. 8 then my third and final picture on kind of what 9 10 we do at NRCS, we take systems that may have 11 extremely, you know, large amounts of erosion, 12 which we all agree is a bad thing, and then we can restore that. 13 We can take a land and put it in a 14 15 different use and deliver photosynthetic activity, improve the whole systematic approach, enhance 16 carbon sequestration, reduce emissions, reduce 17 18 soil loss, improve water quality. The cascade 19 goes on and on it. I'm a climate scientist by 20 So I've always just worked in the training. atmosphere, so I kind of look at the world through 2.1

the glasses of a scientist with an atmospheric

lens.

But I want you to all see yourselves 2 3 in all of these slides. And I hope, you know, I trust that most of you are well beyond all of these 4 practices, and kind of into that extremely advanced 5 level of delivery. Here's a slide that I borrowed 6 7 from Bill Hohenstein recently, and the USDA climate priorities on the left. I'd like to draw your 8 attention to a couple of these that I'm going to 9 focus on for the remainder of my time today. And 10 11 then some of the principles to the right that are 12 also important. So as Mr. Babington mentioned, we've 13 smart agriculture. 14 got climate We want to 15 leverage existing programs, but we want to build these partnerships and learn more about how we can 16 deliver 17 these commodities greener to the 18 marketplace. We've got climate smart forestry 19 quantification methods. Then we have adaptation 20 and resilience, which what we talked about. want our workforce at USDA to be climate informed. 2.1

We have to move out in research and development,

1 right?

We can only move the quantification 2 3 tools as far forward as the research is behind an underpinning that. We've got energy efficiency, 4 renewable 5 energy. We have equity 6 environmental justice, and then we have international cooperation. So we're trying to do 7 all of these things. And at USDA, we're learning 8 along the way, right? We're trying to get all 9 10 these pieces together and move people forward. 11 We may move faster in one place, but then we try 12 to back up and pull another topic forward. We want to be comprehensive over to the 13 right, voluntary and incentive based, that's what 14 I just talked about from NRCS, equitable and 15 accessible, we want it to be cost effective, we 16 public engagement, 17 want and we want economies, as Mr. Babington definitely emphasized. 18 19 So the ones that I'm going to speak on for the rest of my limited time today are really existing 20

programs, the quantification metrics, and the

voluntary incentive based equitable, accessible

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2	And again, please see yourself squarely
3	within this. And the opportunities exist for you
4	all to be part of these partnerships. We want to
5	move that forward. On the left, we've got a 600
6	page document. Many of you are familiar with it.
7	I see a lot of friendly faces on the in the
8	group. I always refer to that as the methods
9	report. That's how we do our quantification.
10	So as Nate mentioned, how do we quantify
11	the N2O emissions to the atmosphere, or how do we
12	quantify the emissions from a tractor? How do we
13	do all of this? And so this is our book. And,
14	and we republish this every five years as the state
15	of science improves. And then we have a handful
16	of quantification tools over on the right, which
17	we try to build to be inclusive, but also
18	scientifically based, which is a very difficult
19	balance to keep going.
20	At NRCS, you may have seen that we have
21	a list of atmospheric beneficial conservation
22	practices. Again, these are NRCS conservation

1

programs.

practices, but we hope that some people will have adopted many of these in the past. Some people may need help adopting some of them. So I hope that you can see yourself there. And we'll pick on 590 right in the middle of the screen, nitrogen management, right? If we can have a nutrient management plan, we can have a nutrient management plan in a conventional context.

But we also need to have a nutrient management plan in an organic operation, because as Nate mentioned, there are great opportunities to reduce N2O emissions, but there's also the potential, if you don't manage that nitrogen properly, to cause that to go to the atmosphere. So we just need to manage, you know, balancing for nitrogen, balancing for carbon, compost manure applications. Those all can be great opportunities to reduce emissions.

But applied in a system that gets water at the right time, and too much of one of those, you can have nitrous oxide emissions. So we've got this list of practices that really can underpin

a lot of the initial work on the partnership, but 1 2 -- with the partnership program. But we want that 3 partnership program to expand our breadth and how we understand what's going on in the country, and 4 then how these things are getting monetized in the 5 As you all know how to monetize 6 marketplace. 7 extremely well, as it has been discussed. We take -- I took all of these and just 8 put them in a little different format. 9 You can 10 see I've got cover crops, and this is going to be 11 for the benefit of my next slide. My next slide 12 is just going to show you -- so this is all the NRCS conservation practices. We have about 33 13 practices, and then a handful of enhancements. 14 Another 80 or so that make up our climate smart 15 list as of today, but we plan to expand that list 16 next year and improve it. 17 18 But if you take this matrix writ large, you'll notice that, you know, I focus on cover crops 19 just to draw your attention to it. But the pieces 20 I really wanted to show you is right here, and this 2.1

is NRCS' quantification work. So we quantify the

atmospheric benefits over time. And those little 1 boxes, that matrix of 33 practices, delivers how 2 3 many benefits -- carbon sequestration, greenhouse gas emission reductions -- we've had over time. 4 And you can see that, you know, in the 5 hypothetical blue curve, that's the NRCS curve. 6 7 That's only what we delivered through Farm Bill programs like Mr. Babington mentioned. Then 8 there's how we mobilize the larger marketplace. 9 And that's our opportunity, because we know the 10 11 red line is the larger marketplace, the national 12 And if we can help influence the national we can lift that, and we can get more 13 curve, atmospheric benefits through these market driven 14 15 mechanisms. So that's just a little bit of thinking 16 on the opportunity, as I mentioned NRCS, we track 17 and try to quantify the benefits of everything that 18 we deliver under the Farm Bill programs that were 19 generously granted through Congress. 20 But we know that's only a fraction of what we can actually 2.1 deliver into the whole, you know, to the planet, 22

actually. And we also keep track of that national 1 curve in the national greenhouse gas inventory. 2 3 the national greenhouse inventory quantification methods, we tried to keep 4 those consistent all the way back to the blue book, 5 6 which is a challenge in itself. So then, at the end of the day, NRCS does an annual quantification. 7 We quantify our soil health practices, and that's 8 inclusive of organic. So please think of yourself 9 being nested in the soil health practices. 10 11 The perennial biomass and agro forestry 12 is the green. You've got livestock operations, livestock that includes grass-fed, and confined 13 animal operations. But we put that all together 14 in how many benefits can we bring forward for the 15 ecosystem from NRCS Farm Bill programs. 16 And those are -- those have to be delivered in a year. 17 So we have two different processes. 18 If you know NRCS well, we do a lot of planning. 19 But I don't get -- I don't take credit for those 20 quantification, until 2.1 in our they generate 22 photosynthetic activity, reduce that methane --

important methane emissions, or stop that nitrous 1 oxide emissions to the atmosphere. And then you 3 can just do a simple and a comparison. last year we had about 82.3 million metric tons of CO2 equivalent reductions just from NRCS. 5 6 And that delivered almost 18 million, 7 you know, offset. I don't say it removed the cars -- cars still stayed on the road. So it offset 8 the emissions of 18 million passenger vehicles, 9 and these other metrics for which we reply -- or 10 rely on on EPA to help us do the inner comparison. 11 12 But at NRCS, we take this quantification very We hope that we could work with the 13 serious. organic groups to deliver on the quantification. 14 Some folks in the Board, I even heard 15 from in the past on hey, I need a crop put into 16 How do I do that? What about I think 17 the tools. I remember hearing it was Logan that talked about 18 19 -- or no. Maybe Logan was on carrots and then there were green field peas and another topic. 20 And we've definitely heard from both of them as Nate. And 2.1 22 we've heard from those not being in comment.

1	The hardest part of that is we're trying
2	to get the quantification into the blue book. So
3	into that blue book, so that then we can put it
4	into the quantification tool. So we need the
5	science and really that's driven by that scientific
6	research agenda, which I think, leadership has
7	recognized the opportunity to improve that, and
8	that's where the climate smart commodities program
9	really comes in, and will help us advance science
10	forward.
11	In addition to our great work with ARS,
12	ag research service. So I'm running about out of
13	time and I've got just a few overarching
14	conclusions here. I want you all to just kind of
15	take away, and I'm happy to to help in the future.
16	We know that voluntary working on this
17	conservation delivers on the climate solutions.
18	We definitely are getting more conservation or
19	the ground, but we need to get even more
20	conservation on the ground.
21	As Dr. Tucker said, you know, I try to
22	tell people I'm trying to get conservation on the

ground. But the other thing that's important is 1 -- and you all know this probably better than 2 3 anybody -- is when you invest in a system and you build soil organic matter, or you plant a fruit 4 tree as we had discussed in the introductions. 5 6 We know that accrues carbon a little bit in year 7 one, year two, year three, and then we all know the look of the tree rings as they get bigger, so 8 9 that accrues more carbon. 10 So the important -- the other really important thing here, and you all know this well, 11 12 is we got to keep the conservation on the ground. Because carbon often begets carbon in these 13 natural systems, and the system likes to move in 14 15 that direction. And then finally, with mitigation benefits are tracked by NRCS, we try to have 16 17 consistency in our quantification methods all the 18 way from the national inventory approach, down to 19 our field level or our farm level quantification 20 tools. So in my wrap-up, I'm going to go back 21 and I do feel 22 to my first slide, which is,

indebted 1 profoundly, you know, to future We understand this problem. 2 generations here. 3 We do have the ability to solve it. One of my recent peers asked me, Knowing what you do about 4 climate change and spending all this time on 5 climate change, how do you sleep at night? 6 7 And so I thought about that for a while, and I responded to her with an adjustment to this 8 quote, which is, we are the first generation to 9 fully understand the problem, and we're actually 10 11 the first generation with the tools to solve it. 12 So with that, I think that's our opportunity, is we get to go from being the last with the ability, 13 to being the first, the first with the tools to 14 15 deliver on it. And I would say, honestly, you all are well ahead of the game, and we have a lot to 16 17 learn from you. 18 But I'm also a scientist, so there's 19 kind of that -- let's do the quantification to 20 support our assertions. And then we have a really compelling story to tell. And I guess that ties 21 22 into Mr. Babington's opening remarks on the

1	partnership program of how trying to get people
2	to show their math and definitely help us expand
3	and improve our mathematics as well on the
4	atmospheric benefits. So with that, I really
5	appreciate the time and the opportunity to speak
6	with you-all. And I look forward to our continuing
7	discussions.
8	DR. TUCKER: Adam, thank you so, so
9	much. Genuinely appreciate your being here, your
10	energy, your enthusiasm, and all your thoughts
11	today. So thank you, thank you, thank you. Nate,
12	did you want to make any quick follow-up on that?
13	MR. POWELL-PALM: I don't think it's
14	lost on anyone on this call how grateful we are
15	for the work of NRCS, and how I think it's an example
16	of really smart scientists helping farmers do their
17	best. So I really wanted to thank you for your
18	work, and everyone at NRCS.
19	DR. TUCKER: Well put. Again, thank
20	you so much.
21	DR. CHAMBERS: Thank you. Thanks for
22	having me. I really appreciate it.

DR. TUCKER: We were thrilled to have 1 you here, so thank you for being -- and we continue 2 3 to -- we look forward to continuing to work with I think we have a lot of joint interest and 4 joint projects to move forward here. 5 So look 6 forward to doing that. And so in the meantime, I think you can stop sharing, otherwise, I don't 7 know how to override your share. You're sharing 8 your dog -- somebody in Zoom is better than I. 9 10 Okay. And thank you again, Adam. 11 You're welcome to stay on. If you 12 would like that, though we assume you also have a very busy day. I'm going to give a couple of 13 follow-up comments to what we just heard, and then 14 we'll move into the NOP update. And so again, glad 15 we were able to bring those speakers in. 16 I wanted to kind of, I did -- I didn't know what those folks 17 were going to say before they came, so I was hearing 18 19 it with you. 20 And as I was jotting down the notes, the word that just keeps on coming back in all 2.1 22 elements of this climate discussion is data. So

the importance of data, to continue to support the 1 science, to demonstrate organic's role, and to 2 3 maximize farmer access to climate smart programs and benefits. So how do we continue to generate 4 data in a usable form to demonstrate and continue 5 to verify, validate, and confirm the role of 6 organic and all of these different -- through all 7 the different practices that organic is already 8 doing. 9 And so I think most -- a lot of folks 10 11 know at this point that as a child of a computer 12 scientist, I do tend to think often in terms of 13 data, and data exchange, and data harmonization. And so, getting more data to support both the 14 15 practical science of this, but also the research side of it. Getting more data is supported by data 16 harmonization that facilitates data exchange. 17 18 And so when I listen to talks like that, 19 I think about all the data that is entering into conservation plans to demonstrate for NRCS through 20 their conservation programs. 2.1 But I also think

about all the practice data that is currently being

lost because of a lack of harmonization and data exchange for organic system plans. Yeah, I looked at the slide that was shown on conservation practices, and yeah, that stuff is all in organic system plant, but it is sitting in PDF forms or in disparate systems.

> And then somebody got to take it, and we've got an analyst here who calls it swivel chair So I enter in this computer, and then interface. I swivel over my chair and I enter it into this other computer. And really thinking strategically about how we can think about dated public-private partnership differently. The leads to a huge decentralization of practice-based data that could really help with this climate conversation.

> And so I really encourage all of us to think about how we can think about data and data harmonization and data flow differently, when we think about things like organic system plans, and other tools that track and report on these climate practices. So some of that's on USDA in terms of

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figuring out how do we make our systems talk to
each other, even though our systems are designed
to do different things.

But how could certifiers also kind of work together for a more harmonized approach to data management with organic system plans. And so I encourage all of us to think about how we can kind of collectively and continuously improve in that data space. So some of the thoughts that came out of listening to our guest speakers today. I did want to answer a question that came up in the chat in terms of NOP's engagement.

We have been engaged with a team that is working on these climate initiatives that you have meeting agency-level meetings, that I have attended, that Erin Healy attended. We have those — have staff members attend. We also will have or we have offered proposal evaluators for the climate smart commodities program, so we will have organic expertise involved in reviewing those applications as well.

So we are engaged in -- in the -- in

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those conversations within USDA. We have provided 1 a variety of information about the standards and 2 3 what what they mean and what those practices are. an undersecretary who is 4 Having an producer really helps in that conversation as well, 5 6 because she understands the language of how to talk 7 about organic across the department. I think that's a very important asset. 8 9 So I got to take a deep breath and close this part of the NOP update. I'm also going to 10 11 pause for a second and drink a glass of water and 12 breathe a little bit, so I'm going to actually encourage we -- do this to certify our training. 13 Let's all take a few breaths. Everybody take five 14 15 breaths, cleansing breaths in and out, while I breathe and drink some water and then I will be 16 back. Five breaths. Doesn't that feel great? 17 18 Okay. 19 We're now going to move to the next part 20 of the NOP update, and it is actually a celebration. I'm going to bring up a couple of slides here. 2.1 22 We are celebrating our organic certifiers today.

And so, I wanted take a few minutes to recognize a big anniversary for the program that happens this week.

Program as a public-private partnership. The system could not work without certifiers and their team. So this Thursday, in fact, marks 20 day -- 20 years since the day that USDA accredited its first class of organic certifiers under the Organic Foods Production Act. And so I will move to the next slide that shows their logos.

So this is the first class $\circ f$ certifiers, the certifiers who have been around since the very, very beginning. And so after so much work by thousands of people across the organic community 20 years ago, the federal standard could officially be used to certify organic farms and businesses. And so this milestone really does help us remember the unique role that certifiers and their staff and inspectors serve in their ongoing work to deliver consistent oversight and continuous improvement.

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And so an awful lot has changed since 1 2 2002. I believe we have collectively worked 3 together to develop and further implement the organic standards. So these certifiers have 4 conducted thousands 5 of inspections over They have filled strong organic control 6 decades. systems that are protecting organic integrity 7 around the world. 8 9 Hand in hand with them, NOP has built the first public database of organic operations. 10 11 The organic integrity database has now been in 12 place for about seven or eight years. So it's part of that history, as is now our learning center. 13 And so we continue to build the infrastructure 14 15 and the systems that ultimately are exercised by 16 organic certifiers and by organic farms around the 17 world. 18 So today, there are 76 certifiers, and their work continues to be vital to the community. 19 20 They in turn work with organic farmers who are using all these natural materials, and who are 2.1 22 taking a systems approach to protect natural

resources, to build soil and water quality and biodiversity. And they are vital partners in consistent oversight, engaging in continuous improvement across a myriad of control system activities.

So we have sent the very first class of certifiers a keepsake. I'm going to put it in the camera here. See if folks can see that, it's the number 20. And so it's a 20, and on the front, it says celebrating 20 years of USDA organic certification. It has the the seal on it. And so to -- we've sent them this to mark the milestone in their own offices. Over the next several days, USDA, the Department will be posting about this anniversary across our social media channels.

And I believe we're going to be sharing in the chat some of those links. So if you would like to help us sort of celebrate this -- a rather momentous anniversary. We hope that you will watch for and share those posts. And so, I want to give -- I know we have a lot of certifiers on the line with us today, so I'd like to pause and

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give them all a big round of applause for everything 1 that they have done. The first class of certifiers 2 3 and every certifier that has followed in their footsteps. 4 Okay. 5 We are going to turn to some key program updates, and a review of feedback from the recent 6 7 regulatory priorities, public comment So we're going to take this in two 8 opportunity. The first -- I'm going to give you an 9 seaments. 10 update of where we are with some key rule making 11 and then we're going to turn to reflections on the 12 regulatory priorities notice. So first, there is a full NOP update 13 that was recorded by many different people across 14 15 It is posted in the organic integrity NOP. It was included in an insider learning center. 16 17 that went out last week. If you go to the learning 18 center, you click on NOP presentations. There's 19 presentation in there that is the full NOP update. 20 And so it's about 40 minutes, gives an update on

repeating all that here, but I am going to review

priorities and recent successes.

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So I'm not

where we are with some key rules. 1 So the first one is organic origin of 2 3 livestock, final rule. And so there was a lot of communication about this, as well as a recent 4 That final rule was published on April 5 6 5th, we are now in a one-year implementation launching training for 7 period. will be We certifiers and operations in the learning center 8 9 later this year, as operations gear up for that 10 change. 11 The organic livestock and poultry 12 standards proposed rule went to the Office of Management and Budget, OMB, in December, and we 13 have been working closely with OMB on their review 14 15 The strengthening organic enforcement process. final rule is in legal review. Now that, for folks 16 17 who track the clearance process, a legal review 18 is an early step in USDA clearance. 19 So it means we finished the role, NOP 20 has been pencils down on this. It is now with the legal team. Another important role is the inerts 2.1

So this is looking at what we're going to

role.

do about list three and four on the national list. 1 That is an advanced notice of proposed rule making 2 3 where we will invite public comments. That's also in legal review. So the lawyers have that advanced 4 5 notice of proposed rule making in review. We also continued to work on other 6 7 national list rules on an ongoing basis, and we generally have two to three rules or notices 8 related to the national list underway at any given 9 So I know there's a lot of emphasis on 10 time. 11 practice standards, but I do want to pause and 12 really acknowledge the strong and steady work of the national list team, that we have really got 13 into a very stable, and by rule making standards, 14 pretty rapid cadence of rule making related to 15 national list. 16 17 making does take time. The Rule 18 national list process shows how that can work as 19 efficiently as rule making possibly can. So this 20 brings me to an important update on the fall 2021 NOSB recommendation to prohibit ammonia extracts. 2.1

And so USDA has decided that we will proceed with

1 the rule making process.

So we will proceed with the rule making 2 3 process to propose adding ammonia extracts as a prohibited natural in crop production on the 4 national list. And we have decided to move ahead 5 6 with that rule making process independently of the Board's current work on highly soluble nitrogen 7 So we are pursuing the rule-making 8 fertilizers. fall recommendation without 9 on that understand you're not -- we haven't voted yet, on 10 11 that highly soluble nitrogen fertilizer proposal. 12 But we are committed to moving ahead with the 13 rule-making process on ammonia extract. 14 So that's our update on that 15 recommendation. I know there's been a lot of interest in that across the community. 16 So that's a summary of where we are with key rules at this 17

time. So I'm going to turn to now discussing the recent priority -- regulatory priorities, public comment opportunity. And you know, before I switch over to that, just because now I've been talking for a little bit, I am going to take a little

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1	bit of a break here and see if there are questions
2	on what I just said. So I know we'll have other
3	questions, but let's see if there are questions
4	on what I just talked about in terms of rule making
5	priorities before we move to the regulatory
6	priorities discussion.
7	MR. POWELL-PALM: Who has questions
8	for Jenny? All right, Amy, please go ahead.
9	MS. BRUCH: I
10	MR. POWELL-PALM: Sorry. Let's see if
11	Jenny's ready. Okay.
12	MS. BRUCH: Okay. Thank you, Nate.
13	Thank you, Jenny, for those really important
14	updates. I know you mentioned about the
15	Strengthening of Enforcement Act still being in
16	legal review. This is an incredible rule
17	important to the community, and I just wanted to
18	ask if there was anything more that we on NOSB or
19	the community can do to impress upon the USDA the
20	importance of this rule in advancing it through
21	rule making?
22	DR. TUCKER: I appreciate that

You know, I often talk about sort of 1 auestion. the rule-making pipeline in terms of things moving 2 3 through different stages. It's called clearance to get all the way through that process. 4 coordinated push 5 was tremendous from 6 community, on origin of livestock. And that is 7 I believe a real -- it was a -- it was very important to origin of livestock getting completed. 8 9 Knowing united how the organic 10 community around completing origin was 11 livestock and how important it was to get that rule 12 finalized and out in the world. The consensus and clear communication from the community on that 13 priority was vital. And it -- it did -- it put 14 15 origin of livestock at the front of the line for rule-making. 16 17 And so for folks who believe SOE, and 18 I'm one of you, believe SOE is as important, it 19 will actually impact more people than origin of 20 livestock in terms of implementation. Your voice works, your consensus, connection, collaboration, 2.1

communication, all those good C words are very

1	important in advancing rules.
2	MS. BRUCH: Thank you, Jenny.
3	MR. POWELL-PALM: Any other questions
4	for Jenny? I just want to thank you for those
5	updates, Jenny, before we move on. And I think
6	that there's growing inertia, I think when we have
7	really great collaboration on the Board, and the
8	program hears our requests, and takes our work
9	deeply into consideration. So we really
10	appreciate that that's being done. Thank you.
11	DR. TUCKER: We got a great standards
12	team here. We really have built that team over
13	the past couple of years here, and they've really
14	refined their practices. A lot of them have grown
15	climbed a pretty big learning curve, honestly.
16	Some joined from outside the organic community
17	and have really dived in whole wholehearted to
18	learn about the rule making process, so
19	Okay, let's turn to the regulatory
20	priorities. I'm going to give an overview of kind
21	of what we learned through that process. So I'm
22	going to start with some general themes, and it's

sort of overview. For folks who may not have been 1 as familiar with this, we advertised a listening 2 3 session, and then within that federal register notice, there was a summary of current outstanding 4 NOSB recommendations, and an invitation for both 5 6 participation and a public comment session, 7 orally. We had a webinar and written comments. 8 9 And so I'm going to give kind of a top-line 10 summary, for those who have not sat down and list 11 -- and read all 572 written public comments. giving you the executive summary, so you don't have 12 to go read all 572 of them, which is an addition 13 to the folks who actually -- who came to the public 14 comment opportunity. So first a big thank you. 15 You know, 572 organizations and people 16 who chose to participate in this process and have 17 your voice be heard, is really impressive. 18 And you for taking all the 19 thank time and thoughtfulness that you did to participate in that 20 Big-picture take 2.1 process. home messages, 22 commenters generally supported NOSB

recommendations and urged NOP to address them by developing standards primarily through rule making.

regularly Commenters noted that will updated standards help protect the environment, protect the organic label, ensure a level playing field, and match the evolving consumer and industry needs. And so many, many said that all topics should commenters prioritized, and all topics should be completed. However, within that broader context of wanting all activities to move forward, there were three that ended up being the most often discussed in the comments.

The first is hydroponics and containers, the second organic seeds, and the third, native ecosystems. And so those three were referenced many times, with some differences in prioritization based on perceived difficulties in rule making. So I'm going to give some more details in a second, but I want to highlight those as the three top topics referenced in response.

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1	In addition to those, many commenters
2	voiced appreciation for NOP's current rule making
3	on recent or in-progress rules. So the ones that
4	we just covered, the strength in the organic
5	enforcement, origin of livestock, organic
6	livestock, and poultry standards, and inerts.
7	Many comments supported their finalization and
8	implementation. Some comments commenters
9	expressed frustration that NOSB recommendations
10	have not been implemented through rule making.
11	However, many commenters also
12	appreciated the outreach to the industry through
13	the Federal Register notice and encouraged an
14	ongoing process of prioritization reporting. So
15	now I'm going to get into the topic specific area,
16	and I'm going to actually start with native
17	ecosystems. And so many commenters discussed this
18	topic. Many ranked it as a high priority issue,
19	and asked NOP to implement rule making for the
20	topic.
21	Several commenters, however, ranked it
22	as a lower priority issue, citing the complexity

of the issue, the lack of statutory authority, and 1 the possible need for legislation before NOP can 2 3 break in rule making. So commenters in support rule making stated that current standards 4 incentivize the conversion of native ecosystems, 5 6 because it circumvents the three-year transition 7 period for farmland. And thev cited importance of biodiversity, consistency with USDA 8 policy goals, consumer trust, and fairness. 9 referenced 10 Some commenters also 11 international prohibitions or restrictions on the 12 conversion of native ecosystems. And so this is one where we truly do understand the importance 13 of this issue to the community. 14 And I'm also 15 realistic about the challenges that many did note in public comments. 16 17 register notice The federal 18 regulatory priorities had noted that before 19 proceeding with this recommendations, we'd like 20 to see significant support by the organic industry, and noted that congressional action may be needed. 2.1 22 And so based on the comments received, those

1 comments still apply.

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Let's move on to hydroponics container growing. This topic is a high priority for many stakeholders. The consumers -- the commenters noted that inconsistent certification and enforcement is causing confusion amongst certifier and producer communities. The primary concern of commenters was whether hydroponic and container systems and operations can meet up the soil fertility requirements. With some commenters suggesting a hydroponically grown, or container-grown, or organic label, or a separate specialty crop standard.

And SO we do acknowledge the significant interest in this topic. There is a current lawsuit on hydroponics, and it is in the The resolution of that case is appeals phase. likely to inform next steps and direction on this topic. We have stated publicly several times in the past that right now we don't have sufficient information to move directly to a proposed rule on this topic. And so we know that many in the

community do have an interest in the board taking
this topic back up. So that's hydroponics and
containers.

Next, is organic seeds. And so this topic was ranked medium high by many commenters, with most commenters supporting increasing the use of organic seed. Some commenters did say that the current regulations are adequate, and that mandating use of organic seed would unnecessarily burden farmers. They asked that the commercial availability exemptions remain in place.

Commenters stated that research on organic seed has stagnated, and cited importance of continuous improvement benchmarks to help drive innovation and increase the use of So a couple of comments on this organic seeds. one. NOP -- we are aware of concerns about the low use of organic seed. We noted in the federal register that we had not made this recommendation a regulatory priority because we believed that the recommendation is already addressed by USDA regulations for commercial availability.

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Because we did have some concerns about how the provisions were being implemented, we did invest in developing training on organic seed sourcing as a practical, high impact step. that training is available in the Organic Integrity And so the public comment Learning Center. process, as well as the new organic seed survey that the Organic Seed Alliance will be discussing during this meeting this week, have really provided very useful feedback and historical very, background that will be helpful in re-evaluating this priority moving forward.

I shared in another setting that I —
if I had placed a bet on what the highest priorities
were going to be, this wasn't on my list, and now
it is. So I think the public comment process
really does work because it was very helpful to
read through the public comments on this particular
topic. One of my common questions when people say
we need new standards is: Well, do we really need
new standards, or do we need to be better enforcing
the standards that we have? And sometimes the

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answer's both/and. And so I appreciate 2 feedback on this topic. 3 The next set of topics of relate to rules, where a rule-making process had begun under 4 Secretary Vilsack's first term. 5 And so I'm going 6 to now run through those with some feedback from 7 public comment. Mushrooms, most comments did support developing mushroom standards and ranked 8 9 this issue as a medium priority. Many commenters felt. should 10 t.hat. advance all NOSB we 11 recommendations, and this is one of those. 12 And some comments noted that existing 13 crop standards are not appropriate for mushroom 14 production, such as compost requirements. 15 food, comments again, generally supported the standard thinking all recommendation should move 16 forward, but did rank it as a lower priority. 17 18 Apiculture, commenters again, generally supported the topic ranking it as a 19 slightly lower priority. One certifier did rank 20 it as their second highest priority. And then 2.1 22 aquaculture, most comments did support developing

the standard, but generally ranked it as a low or 1 medium priority. Our commenters did note the need 2 3 for consistency and the unfair advantage for -that foreign aquaculture producers currently have 4 versus domestic producers. And there were some 5 6 specific comments about including algae 7 spirulina production in those standards.

So those are practice standards that had been initiated under the previous Vilsack administration. Okay. Now I'm going to turn to a set of comments on other topics. And I'm going generally in order of the number of comments, particularly an individualized comments that came in.

Genetic engineering and excluded methods. rank this Most commenters as а medium-high priority, except for one certifier or who noted that certifiers already enforce this Some comments claimed that a better consistently. definition of excluded methods would increase consumer competitive -- competence, but others claimed that prohibiting technology may cause --

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2 For handbook updates, commenters rank 3 this as a medium high priority, asked that NOP to regularly update the handbook, especially after 4 rule-making. Others pushed for more educational 5 6 resources, and others said that learning center 7 substitute should not for written courses There were a mix of comments on the 8 standards. handbook, and this came out in the verbal comments 9 as well, about how questions about how well they 10 11 could be enforced compared to the actual standards. 12 Emergency synthetic parasiticides. There were only a few comments on this topic. 13 ranked it as medium-high priority, except for the 14 15 accredited certifiers association, which did not believe standards development was needed on this 16 Several commenters asked NOP to better 17 topic. define emergency. So not a lot of comments on 18 that, but the ones who did comment focused on that 19 20 term. Commercial availability with processed 2.1 22 products, commenters generally ranked it as a

may increase confusion and stifle innovation.

not as high priority, because ACA has already 2 3 issued best practices on the subject, which has been supporting certifiers. Livestock vaccines 4 using excluded methods, many rank that as a lower 5 6 priority, citing verification challenges, a lack 7 of market impetus to develop organic appropriate vaccines, the unavailability of alternative, and 8 animal welfare impact. 9 finally, 10 personal And then care 11 products. There were a few comments on this, but 12 not many, and only one ranked that as a high 13 priority. And so most commenters noted the jurisdictional complexity of that 14 particular 15 There were other comments. So it came in topic. through this process on, for example, challenges 16 17 for of climate change organic farmers, 18 communicating organic climate is smart 19 agriculture. Comments related to the structural and 20 2.1 procedural changes to the NOP and NOSB, I'm going

medium-low priority, noting that rule making is

to talk about that more in a second.

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Organic

research and research funding, increased budget capacity for standards development. And we have stepped up in standards. And then there were some comments on high nitrogen fertilizer.

of standards. We do have quite a robust team, there are a couple of public documents who -- that reference that NOP only has, like, three or four people working on rules. And I'm not quite sure where that number came from, we have a lot of folks who are working on -- on rule making activities with -- within NOP, and really have built up that team over the past year and a half or so. So okay.

Final sort of comments on some items that were actually not listed in our federal register notice, but did receive some comments. Some link to that structure on procedures changes category, and named those comments as priority. So I actually wanted to use two of those as kind of case studies that illustrate what I call sort of the civics of NOP, and how different policy topics play out, depending on how they get raised

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And so one of the topics that comes up 2 3 sometimes with respect to procedural changes relates to the sunset process. And so I did want 4 to touch on that a little bit, because I think the 5 6 story of the sunset process helps illustrate how 7 these processes can play out. And so many years ago, USDA changed how the board votes on sunset 8 reviews using a federal register notice. 9 So there's a federal register notice 10 11 that formally changed how sunsets are considered. 12 That notice was subsequently contested in a The lawsuit charged that it was unlawful 13 lawsuit. for USDA to -- to do that. In the end, the lawsuit 14 -- the ruling in the lawsuit stated that the federal 15 register notice itself was ultimately a process 16 change, and was not a final action, like an actual 17 18 listing or de-listing would be, and that the court 19 would rule on in terms of harm. And so that lawsuit ended based on that 20 2.1 sort of process determination. Ultimately, 22 Congress then changed the organic through its

and how they get resolved.

production act to require that any change the 2 national list, an addition or a removal, required 3 definitive vote. And so that codified the federal register notice that AMS had published on 4 5 the sunset process into the act. This is why we consider the topic closed, is because it was 6 embodied within the act that any change to the 7 national list, an addition or a removal, required 8 a two-thirds majority vote. 9 So that's one of the topics that came 10 11 up, or I wanted to talk through the sequence of 12 events on why we believe that topic is closed. The second was -- there were a lot of comments on 13 natamycin, and urging NOP to implement the board's 14 15 recommendation on natamycin. That's another one where I wanted to walk through the process because 16 it is a bit of a cautionary tale to remind people 17 of how important the rule-making process is. 18 19 And so, just to review the history on 20 this, based on -- the NOSB had recommended that natamycin be listed as a prohibited natural. 2.1 22 Okay. So a recommendation was prohibited as a

And so we included that in a proposed 1 2 rule. So we proposed to implement the Board's 3 recommendation. So the rule proposed to list natamycin as a prohibited substance in organic crop 4 5 production. 6 Many comments, though, during 7 making were received opposing that proposal. so in the final rule, the proposal was not adopted. 8 As such, natamycin does remain allowed. 9 10 it is a reminder that there is a public comment process during the board process, but there's also 11 12 a public comment process during rule making. it is important to have your voice heard in both. 1.3 And so if you participate in the board 14 process, also, come back and participate in the 15 rule making process when things are published and 16 proposed rules, because there's a full life-cycle 17 of rule making that has to happen to take an NOSB 18 recommendation and finalize it into a final policy. 19 So I understand that some folks do want to keep 20 an item open when NOP takes an action that many 2.1 22 disagree with, or when a final action differs from

a board recommendation. I commit to when we close an item, I'll 2 3 try to be more specific on why we consider that item closed, and it will be from a process 4 5 perspective, why we consider that item closed, and what the drivers and criteria are for that. 6 think that transparency is important for being open 7 about the process and being clear on where things 8 stand. 9 So now let's briefly talk about next 10 11 steps here. First, again, I want to thank everyone 12 who participated in the process that led to the summary that I just gave you. I want to talk about 13 next steps and tools from here. 14 So first, every 15 six months approximately in the late spring and late fall, the Office of Management and Budget --16 you know, we talked about them a lot now, OMB. 17 18 They published what is called the Unified Federal 19 Regulatory Agenda. Again, the Unified Federal 20 Regulatory Agenda. You can Google that. And it lists the rule making activities 2.1 22 that the administration anticipates engaging on

in the next year and into the long term. 1 the most important codified list for formal vetted 2 3 decisions about rule making priorities. want to keep an eye on that for USDA and AMS to 4 has formally committed 5 see what USDA 6 priorities in the rule making process. 7 So rules that going are be anticipated for the next year or so are published 8 in one part of the agenda. There's also another 9 10 part of the agenda that lists long-term action. 11 So those are things that there's no date attached 12 to them yet, but the department considers them 13 important. And so I encourage you to do the exercise of finding the agenda and looking at it 14 15 for AMS to see what's on the list, and what the long-term actions are. And somebody's just typed 16 17 in the link, which is wonderful. So thank you very 18 much. 19

Now at the program level, we do maintain the NOSB recommendations library. It's available on the NOSB recommendations page. So after this meeting, I commit to you that I'm going to review

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that list again. I'm going to update it based on 1 what we've learned through this process. 2 So there 3 are a couple of that have been marked as closed, meaning we're not working on them. I'm going to 4 5 change those, too. I might need to come up with 6 a new category. 7 But I do believe that based on this exercise, but also based on this administration's 8 sort of openness to working on practice standards 9 that that list may change. So I'm going to update 10 11 that including more details. If we do still 12 consider an item to be closed or in process, why. So I'll give a bit more detail on that. We will 13 also consider other ways to keep the community 14 informed as we make decisions about priorities. 15 generally review 16 We do standards, priorities as part of our regular program updates 17 I will also try to share the reasons we've 18 to NOSB. chosen not to move forward with certain priorities. 19 And I know that people will still disagree with 20 those decisions, but I will be clear with you on 2.1 22 what the current decision is and why.

We'll also look at how we might include 1 more of this information in our memos to the NOSB 2 3 that we complete after each meeting. Those are already standing mechanisms of communication. 4 5 And so those have been sustained through multiple administrations as standardized tools that we use 6 7 to communicate with the organic sector. And so memos to the board are useful 8 for communicating both to the board and the public. 9 And since they're posted on our website as public 10 11 comments, they can be tracked over time. And there 12 are going to be times when we're going to say something in a memo to the NOSB, and a few months 13 later, it will change because new information 14 15 becomes available or priorities shift. And so I do think there's always a 16 17 little nervousness in putting on paper. 18 now, we're committed to this, because if that changes down the road, well, you said five years 19 ago that you were committed to this. 20 And well, 2.1 yes and that was five years ago. And so there has 22 to be the ability to move over time and space as

conditions change. So I'm going to close there. 1 2 Again, thank you to everyone 3 participated in that process. That was a lot, but I think it was important to take the time to go 4 5 through the summary because you took the time to 6 have your voice be heard. And so thank you for 7 listening to that readout. And I'm going to hand it back to Nate to facilitate any questions and 8 feedback from the board. 9 Fantastic, thank you 10 MR. POWELL-PALM: 11 so much again for that update, Jenny. Round of 12 applause. Thank you, this is -- it's exciting, 13 our work is being heard, so we're really grateful for it, and there is more to do. So questions from 14 15 the board for Jenny. This is sort of a general opportunity for Q and A from board members to the 16 Carolyn, please go ahead. 17 program. 18 DR. DIMITRI: Great. Thank 19 Thank you for that update, Jenny. I have two questions about things that have been -- that 20 predate me on the board, and so this is maybe also 21 22 partly information gathering for myself. And one

1	is about native ecosystems, and the other is about
2	inerts. And so there are two things that I
3	actually know very little about.
4	And so I think for native ecosystems,
5	I'm wondering, especially with this
6	administration's interest in climate change, and
7	I'm not really sure how native ecosystems fit into
8	that. Is there, like, anything the NOSB can do
9	to, like, reshape that or bring that to life, or
10	is that just dead? Or I don't know if I'm allowed
11	to be so blunt in my question, but that's me.
12	And then the other question with the
13	inerts. Another thing that seems important to me,
14	and it's like I'm not that kind of scientist, so
15	I can't always wrap my head around it. It sounds
16	to me like the NOP is going to take additional steps
17	on this, and I'm just wondering if you can elaborate
18	upon that process and how you see it going ahead.
19	Thank you.
20	DR. TUCKER: Yeah. Great questions.
21	Let me talk about native ecosystems first. Yeah,
22	this is one where there's a lot of science involved.

There's also a lot of emotion involved. 1 2 feel very, very strongly about this, and it really 3 does strike at the core of organic, some very key The challenge with native ecosystems 4 questions. has been that there is the intent of the organic 5 6 community and the intent of organic. 7 there is the actual act, the Organic Foods Production Act, and what it says. 8 9 And so the recommendation from the NOSB, it drew outside the lines of OFPA. 10 And so 11 it called for, like, a ten-year transition period. 12 So there were things in that recommendation that really can't -- there's not a line back to the act 13 on how it would fit within what Congress actually 14 15 authorized us to do regulations on. So the question is, what's next? 16 17 There's also questions of costs there, 18 that's -- there's a question of whether it would 19 actually discourage transition, and questions of 20 So economic impact of that role. 2.1 right now, it is -- we do take the is --22 recommendations seriously. We have done internal

1	sort of thinking and talking and analyzing on it.
2	And as some of the public comments said, you really
3	can't get around some of the legislative issues.
4	So the question is, I've heard from
5	folks who are willing to compromise on this and
6	who have learned a lot also about the boundaries
7	of OFPA. And so the question is: Does the board
8	want it back? Would you want to request a work
9	agenda item to see if you can come up with a
10	recommendation that would be more closely aligned
11	with OFPA?
12	I'm open to that conversation, because
13	right now it is not actively on a regulatory agenda.
14	I think if the Board is this is something the
15	Board wanted to take another stab at closer more
16	closely aligned with OFPA, I'm open to hearing
17	about that and having that conversation.
18	On inerts inerts is incredibly
19	complicated. And the Board has come up with
20	recommendations on inerts. There is no easy
21	button on inerts. And so there was a
22	recommendation from 2015 that really called on us

1	to work with EPA and the Safer Choice Program.
2	We've been in touch with EPA and the Safer Choice
3	Program, and it's not a good fit with them.
4	They have a very different theory of
5	the case, in terms of their reason for being is
6	very different. They don't have a list that is
7	codified in the regulations, which is a problem
8	for us in terms of how the process works. So I
9	think the recommendation that the board came up
LO	with is it's just not feasible, given EPA's
L1	definition of their programs.
L2	And so we have prepared an the board
L3	at that has discussed this. And I've put
L 4	the general feeling was we need to hand the reins
L 5	over to NOP and the community for a little bit,
L 6	through an advanced notice of proposed
L7	rule-making, to get some concrete recommendations
L 8	on what the best path is.
L 9	So what we've done is, we consolidated
20	all the conversations that have had done to date
21	with a number of options based on everything that's
22	heen heard so far And we've written it into an

1 adv	anced notice of proposed rule making. That
2 wou	ld be a formal publication, the federal
3 reg	ister, that everyone would then have the
4 opp	ortunity to comment on.
5	Based on that, it could either go back
6 to	the board for a very specific question. Or we
7 cou	ld move ahead with the proposed rule, based on
8 the	feedback. It could go either way depending
9 on 1	what comes out of the ANPR. Carolyn, that was
10 a lo	ot of data, did it actually answer your question?
11	DR. DIMITRI: Yeah. Both of those
12 were	e really wonderful answers. Thank you, Jenny.
13 I -	think I have a much better sense of where, you
14 kno	w, where the world stands on those two very
15 com	plicated and important issues. Thank you. I
16 app	reciate that.
17	MR. POWELL-PALM: Thank you for that
18 que	stion, Carolyn. Next up, Kyla.
19	MS. SMITH: Jenny, thank you so much.
20 Th	at was a great update. I'm going to ask you
21 a q	uestion not related to anything that you just
22 tal	ked about. So apologies about that. But this

is sort of top of my coming off of OTA's Organic 1 And that being that there's 2 Week. several 3 situations happening on the international landscape that either are or have the potential 4 to impact imports of certain commodities, mainly 5 6 soybean meal and certain oils. 7 And so I just wanted to ask you, what do we all need to know and keep in mind, up and 8 down the supply chain or other stakeholders, if 9 and when we are hearing about these shortages and 10 11 are trying to preemptively plan for shortages that 12 are being caused by the international situations? 13 DR. TUCKER: Yeah, great guestion, really important in the daily lives of a lot of 14 15 farmers and a lot of processors out there in the So I'm going to share with you and then 16 world. by extension, the entire community here, our policy 17 18 on this. So the question relates to the use of 19 ingredients non-organic feed and in organic commodities and products. 20 So generally how the question comes to 2.1

us, may I use non-organic feed to feed my livestock?

Or may I use a non-organic ingredient in my potato 1 chips or whatever my processed product? And so 2 3 since the start of the pandemic in fact, the program has periodically been asked if we would allow the 4 example, non-organic 5 temporary use of, for 6 livestock feed for organic, as an example, poultry. 7 And the temporary use of non-organic ingredients in processed food during -- due to different types 8 of supply chain disruptions. 9 You know, our primary mission has to 10 11 be to protect the integrity of the seal and to 12 ensure a fair and competitive playing field. requests for exemptions to the regulations, such 13 as the use of non-organic feed and ingredients, 14 15 are handled through a process called the Temporary Variance Process, which is laid out in the regs 16 17 and the NOP handbook. Those requests come from 18 certified operations through their certifiers to 19 the NOP. 20 And so with respect to requests for non-organic feed, it is longstanding published 2.1 22 policy and practice that temporary variances may

not be granted for feeding non-organic feed to 1 organic livestock. This is outlined in NOP 2606, 2 3 which is our instruction on temporary variances in the NOP handbook. This type of both formal and 4 5 informal request has been submitted for dairy 6 animals in the past due to drought. And we have 7 rejected it every time. supply chains 8 So have

questions recently have been different. They focused more on poultry than on dairy, but our messaging and policies have been consistent over time on that. We've also received the question about non-organic ingredients. Most recently, we reviewed and evaluated two temporary variance requests to use conventional non-GMO sunflower oil in place of organic sunflower oil in certified organic processed products due to business interruption.

And so I'm going to get a little regulatorily wonky here because I think it's important. The regulations at 7 CFR 205.290e, which is temporary variance -- it's part of the

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temporary variances section, says that temporary 1 variances cannot be granted for any practice, 2 3 material, or procedure, prohibited under 205.105, which is allowed and prohibited substance methods 4 and ingredients. Now, sunflower oil is not listed 5 in 205.606, which is non-organically produced 6 agricultural products allowed as ingredients. 7 And so as such, non-agricultural sun 8 9 -- non-organic sunflower oil is a material that would be prohibited under 205.105d, and therefore 10 11 may not be used in products labeled as organic. 12 And so these are regulatory constructs that are laid out in the temporary variance section and its 1.3 cross references throughout the regulations. 14 15 And so the use of only organic feed for organic animals and the use of organic ingredients 16 in organic products, or it's consistent with the 17 18 regulation, is expectation and а core for 19 consumers, and is essential to maintain a fair and 20 competitive market. And so I did want to -- I appreciate the question. We've been getting that 2.1 22 question enough, but I think it's useful to review,

even though it's wonky, the full picture in this 1 public setting. Again, that was a lot. 2 How did 3 we do? MR. POWELL-PALM: Great. That was the 4 wonkiness we need right now. 5 It's a tumultuous 6 time, so really appreciate the depth you do in 7 Next up, we have Wood. there. Thanks as always, Jenny. 8 MR. TURNER: I apologize. It's going to be a little bit long 9 as well, but I'll try to keep it brief. You know, 10 11 I'm listening to Sean Babington speak this 12 morning and referencing this issue, and then trying to sort of reconcile the conversation -- the 1.3 presentation from Adam Chambers with this sort of 14 15 need for data. And sort of deeper data and deeper harmonization. 16 17 You know, something it's on my mind 18 relative to that topic is the fact that we still 19 have very persistent areas of certification for 20 folks that don't have for socially disadvantaged 2.1 farmers, you don't have access to as many systems, 22 don't have access to the data collection tools and the like, and so I'm just -- it's hard to sort of almost process sort of where we need to go relative to kind of the need for data.

And I'm just curious, I know you have spoken to this before, but I'm curious about progress that's being made at USDA and in the NOP to make sure that resources are getting allocated to farmers who have been -- who don't have access to the kinds of resources that are needed to be able to ensure sort of an affordable certification process. And I'm just curious about partnerships that may exist that sort of help ensure that folks who have not had access or not had as much opportunity to participate in the program, are getting some of these funding opportunities to a variety of means.

So if you could speak to that a little bit. And if you can put it in context for some of these leaps forward that I think the reference in some of what Adam particularly was talking about today. That would be really helpful, if that make sense.

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1 DR. TUCKER: Yeah, it does make sense. And so let me briefly talk through -- there is 2 3 a significant interest in the topic of how best going through 4 to support farmers organic And so last year, Secretary Vilsack 5 transition. did announce that USDA would be providing 200 6 7 million to support organic transition initiatives with a goal of building more, and better, and fairer 8 9 markets for any farmer with interest, by helping 10 farmers navigate transition and supporting a 11 strong market. 12 The details associated with that 13 organic transition program are being developed 14 right now. And SO we've heard a lot from 15 of transitioning stakeholders on the needs 16 farmers. So the importance of consistent standards and the importance of protecting those 17 18 standards, but also the need to support 19 transitioning farmers and remove those supply 20 chain barriers. And so we've heard that the need for 21 22 direct farmer to farmer mentoring and technical

1	assistance to really have somebody right in your
2	community who can help you understand, and navigate
3	the technical aspects, who speaks in your language,
4	and who understands not only the physical
5	environment, but the cultural environment, the
6	market environment that you're working in. And
7	the need to engage knowledgeable really local
8	partners that provide very much hands on, like,
9	field base assistance, workshops, field days,
10	access to local resources, and peer-to-peer
11	mentoring.
12	And a range of topics, things like
13	agronomy, certification, extension services,
14	where do I go to get help, conservation planning,
15	business development, navigating the supply chain,
16	regulations, and even local marketing.
17	Strengthening the link between conservation
18	management and organic transition. That comes up
19	over and over again.
20	We can do some of that at headquarters
21	here. We can work closely with NRCS to talk about
22	how do we get these systems better aligned. But

1	we also need to build the expertise across USDA
2	to build a pool of organic inspectors, really
3	focusing on those underserved traditionally
4	underserved area in a way that supports equity
5	while also developing market.
6	So that's a lot of need out in the
7	community, and we have heard that those are the
8	types of services that would help make that
9	on-boarding into transition a bit easier. Again,
10	we're not ready, USDA is not quite ready to announce
11	a sort of a the formal program, but those are
12	the types of things we've heard, and it does build
13	on that commitment that Secretary Vilsack made
14	about a year ago on organic transition.
15	So I don't right now, would have the
16	specifics of that program to talk about. But I
17	can tell you that it is a big point of interest
18	and emphasis within the administration.
19	MR. TURNER: Appreciate the progress.
20	Thank you.
21	MR. POWELL-PALM: Amy, please go
22	ahead.

1	MS. BRUCH: Sure. Thanks, Nate.
2	Jenny, thank you for your detailed explanations
3	to our questions that you're that we're
4	answering or asking. Anyway, I have a two-part
5	question on economics. I know economics is an
6	additional metric the NOP leverages in order to
7	evaluate the NOSB recommendations and to turn them
8	into rules.
9	First part is, can you elaborate from
L 0	what point of view economics are considered, since
L1	the organic community is diverse and consists of
L2	organic certificate holders and non-certificate
L3	holders. I just wanted to know that perspective
L 4	of which viewpoint you look at and consider.
L5	And then secondarily, I just wanted to
L 6	know the timeline that you are also evaluating when
L7	considering economics. Because from a point of
L8	view of one group, costs might be high on the front
L 9	end, but if you look at another group's point of
20	view, they could incur significant cost down the
21	road or accumulative cost.

DR. TUCKER: Yeah, you know, they have

entire courses on that question. 1 2 MS. BRUCH: Yeah. 3 DR. TUCKER: But I'm going to give a bit of an overview, because I think we are all 4 learning a whole lot about what the Office of 5 6 Management and Budget, again, OMB, is really 7 interested in when it comes to cost with these We learned as a team a lot in writing and 8 rules. finalizing, strengthening organic enforcement 9 10 origin of livestock and in the OLPS process. 11 so -- and this is something that we don't consider as much at the board level, but is -- comes front 12 and center during rule making. 13 And I think that is some of the times 14 15 the disconnect, where people that go well, the board process should be, that is the thing. 16 know, what it -- what about all this stuff. 17 18 the board stuff that really is at the heart of it. 19 And we have to remember that rule making is under 20 a completely different set of rules. called the Administrative Procedures Act, and OMB 2.1 22 governs how rules consider economic analysis.

that's really separate from any back-up process 1 2 that governs the board. And so I think there is a little bit 3 of a switch that happens when we get to rule-making 4 in terms of economics becoming kind of front and 5 And so if OMB deems a rule significant 6 center. or economically significant, meaning it hits a 7 certain cost threshold, that we have a number of 8 steps we need to go through for economics. 9 most organic regulations beyond routine national 10 11 list rules are considered significant, because 12 they raise policy issues that are novel, therefore they required economic analysis. 13 So what does that actually mean? 14 are actually nine steps to it. We have to identify 15 what the need is, so what is the problem to solve? 16 We have to define the baseline in terms of how 17 18 much does it cost now. So origin of livestock just published, that's an easy one to talk about. 19 20 is happening? So what are the practices out there

What is the time horizon of analysis?

and how much did those practices cost?

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1 So how quickly do farmers need to change their 2 practices to a new method, and for how long will 3 those cost be incurred. If you're talking about changes to capital investments like buildings and 4 5 things like that, there maybe a longer time 6 calculations and sometimes agencies use, example, IRS depreciation models to figure those 7 types of things out. 8 9 So there are a lot of different kinds 10 of data that you can use to define the baseline 11 and the time horizon on when things would change. 12 Generally, you identify a range of regulatory 13 alternatives, SO no action is always an 14 alternative. And then there may be different 15 types of alternatives that have different costs Sometimes different. with those 16 them. alternatives relate to how long it will take for 17 18 the implementation period, because different costs 19 maybe incurred over different time periods. 20 What are the consequences of those 2.1 alternatives, you have to describe sort of, 22 therefore, what's the if-then consequences of each

of those alternatives, and quantify and monetize
the benefits and costs. You also have to discount
the future benefits and costs. And so they're all
sorts of economic formulas and very complex Excel
worksheets that go into these things.

There's also non-quantified and non-monetized benefits and costs. So I think one of the things we struggle with in organic is quantifying the benefits. So how do you quantify the benefit of a rule, because it turns out, you know, consumer expectations sounds lovely and is really hard to attach a number to when it comes to something like origin of livestock, right? And so how do you find the numbers that support the benefits?

And how do you find the cost figures when you're working in a public-private partnership where certifiers have a lot of this data, and there's a full range of production practices. So those costs really do relate to whatever the rule is at hand. And how do you quantify or describe the consumer benefits or the

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benefits to producers?

Now, it was interesting in SOE and this 2 3 was in the proposed rule that was published. I can talk about that. That the benefits outlined 4 in SOE related to the avoidance of fraud. 5 if you're decreasing the incidents of food fraud, 6 you have to make all sorts of estimations based 7 on published research on how much does food fraud 8 And if you take these actions, how much food 9 fraud are you going to cut out of the system? 10 11 how much money is that going to save? 12 Again, it's very, very quantitative. And so we often in organic talk about the intent 13 of the act, or our consumer expectations, or all 14 15 of the non-quantified benefits, just like the climate conversation with data -- OMB likes data 16 They really like data. And that's hard, 17 a lot. 18 and so the costs are considered -- the benefits 19 specifically are calculated based on the alternatives in a rule, what the rule is going to 20 do, and how it changes practices. 2.1

So for example, origin of livestock may

have actually a big impact in the market. 1 The costs are actually relatively reasonably 2 3 compared to other kinds of rules. Now it might cost certain types of operations money, and there 4 might be disproportionate costs based on the size 5 6 of the operation and the current practices to 7 change those practices.

> Strengthening And SOE, Organic Enforcement, a lot of the cost are actually paperwork in nature, that certifiers need to do more supply chain analysis. So it's a lot of the costs of that verification need to be taken into account. So again, time analysis, time periods, and the actual cost and the audiences impacted vary by rule and by the data that is associated with a stakeholders who are actually impacted by those I'm going to pause there for follow-up or questions. That might have been more than you wanted.

> MS. BRUCH: No, that was really helpful to just understand, just because I do know, again, our community consists of those that hold

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certificates and those that do not. And we work 1 together in concert. So it was just helpful to 2 3 hear that in a bigger picture of how these things are evaluated. Thank you. 4 5 MR. POWELL-PALM: Sorry about that. 6 Thank you for the questions so far. As we move 7 forward, we are running well into the lunch hour. So if folks could try to keep them succinct, you 8 9 keep your questions succinct so we can all get to 10 through everyone, and still have the time for a 11 break, that would be great. So Allison, please 12 go ahead. I'll cut my long rambling 13 MS. JOHNSON: 14 preface to the question then. Thanks, Jenny, for 15 your time and for the focus on climate smart agriculture today. I think it's really exciting 16 17 to have recognition within our world of what 18 organic can contribute to the conversation, and I'm excited to see it on our work agenda. 19 And I'm 20 curious, if you could say a little bit more about what you see the NOSB's role and our stake holders 2.1 22 role in advising the program and raising the

1	profile of organic within USDA and the
2	administration at large as a climate solution.
3	DR. TUCKER: I will also keep this
4	short. I think the it's so important to come
5	up with practical solutions. Climate can feel so
6	big, and so multi-dimensional, and so messy. I
7	would love the board to come back with
8	recommendations that are practical for farmers and
9	that help us communicate effectively about climate
10	change both across USDA and with farmers.
11	And so, a lot of the questions we've
12	asked are pretty concrete because it can get so
13	big and so esoteric. But I do think, you know,
14	the path for work can centralize so much around
15	organic practices that are already being done.
16	How do we explain it? How do we capitalize it?
17	How do we capture it? How do we tell that story
18	using data in a compelling way? How do we help
19	organic farmers navigate that world? But I would
20	love to see a focus on practical impact out in the
21	community.
22	MR. POWELL-PALM: Javier, please go

2	MR. ZAMORA: Thanks, Nate. Thanks,
3	Jenny. Anything they throw at you, it seems like
4	you are very well prepared, and I really appreciate
5	that. So my comments and my couple of questions
6	that I have are really simple. I wanted to ask
7	you, you describe the process and you summarized
8	really nicely the different comments that we got
9	written and verbal comments during the time the
LO	people, the public were able to make comments.
L1	And one of the first questions is, and
12	then there's a second period during the
13	implementation of the ruling, that there's another
L 4	opportunity for the public to make some comments.
15	But not everyone does that. They don't return.
L 6	And my question is: Do you does the NOP take
L7	consider the first set of comments at the
L8	beginning for the second process of
L 9	implementation? Again, I'm new maybe, yes, but
20	that's one.
21	And I'm saying this because sometimes
22	there is a limit of how many people can actually

ahead.

make comments. I'm talking about farmers and 1 constituents around here. So it's limited, it's 2 3 not for everybody. So maybe as they're doing the implementation of the ruling, it's -- it gets a 4 little more corporate because people are following 5 6 what's going on. So those initial farmers don't 7 really have the opportunity to make comments again, because maybe limited to how many people. That's 8 9 one. 10 And then, you also talked about changes 11 of, you know, the percentage of the rule making 12 doesn't get out of the pipeline. And a lot of 13 people were very frustrated with that. What's the percentage of changes in, let's say the board, the 14 15 NOSB board, some part of it now decides to makes a rule, but then it's an adverse at the end. 16 17 the percentage of that? Because I hear, like, it's 18 a high percentage. 19 And then I guess that's about it. 20 anything that as we talk and how fellow board members, how they're -- how smart they are. 21 Ιt 22 sounds like there's questions, and questions,

1	questions about just every little thing. And I
2	would probably be here for a week. But anyway,
3	those are all my questions. I really appreciate
4	you taking them on.
5	DR. TUCKER: Yeah, they're great
6	questions. And so, I'll take the first one first
7	about kind of these two phases of board work and
8	rule-making work. And I do talk about
9	participating in both. When we write a proposed
10	rule so we do pick up a board recommendation,
11	we write a proposal. That proposed rule, we do
12	take the board input very seriously. And in fact,
13	a lot of that proposed rule really describes what
14	the recommendation was.
15	And it wouldn't even that it's
16	very important background and context for why we're
17	proposing it and how we propose it in the rule.
18	So all of that work into the board process does
19	feed forward into that proposed rule phase. I've
20	gotten some really interesting recommendations and
21	comments about how that tie-back could be stronger.
22	So for example, in the supporting

Τ	documents part of the docket, when we approach a
2	rule, could we be more overt in linking back to
3	board to work on a topic to make that connection
4	more complete, so people who are working in the
5	rule-making process can see all the work they might
6	not be aware of, all the work that went into that.
7	And that seems like a really good idea to me to
8	tie those processes together and say, hey, this
9	recommendation came out of an awful lot of work.
10	And we do describe those in the proposed
11	rule. The comment period, what we do, though, in
12	a proposed rule that differs from what the board
13	does, is we do, for example, for the significant
14	rule, do a fairly detailed economic analysis, all
15	the stuff I just talked about, in the answer to
16	the last question, which is in the proposed rule,
17	that isn't part of that NOSB recommendation. So
18	it is new information.
19	And I think so for that phase, we
20	do need everybody kind of commenting again on
21	whether the costs are accurate, whether we miss
22	costs or their benefits for which there are data

that we haven't captured. So the proposed rule 1 does capture the Board's work, but it also has this 2 3 additional cost component, which is why it's so important to continue the comment process. 4 5 You know, we had three phases of public 6 comments for Origin of Livestock, where we over, and over, and over, and over again asked 7 please give us more cost data. Please give us more 8 data that -- to inform this rule-making. 9 where -- that part isn't really part of what the 10 Board tends to look at because of the criteria that 11 12 the Board is considering is different from the 13 rule-making process. So I think that's why both phases are 14 15 important, and why they're different, and why people who really do care about the economics are 16 paying very close attention in the rule-making 17 18 process, because that's where rule making -- that's 19 where the economics tend to play out is in the 20 rule-making process, not the Board process. So they're slightly different emphasis points. 2.1

In terms of the amount of rule-making

that moves ahead, we do keep a -- it's kind of the 1 score card, that recommendations library that we 2 3 It has the percentage complete of all the recommendations that have come from the Board, what 4 we've completed. Now, according to our tally, I'm 5 6 going to use the lowest number. 7 For practice standards, it shows that we have implemented more than 80 percent of the 8 Board's recommendation. don't 9 We always implement those things through rule-making. 10 11 sometimes, I said it earlier, you don't have to 12 change the rule. What you need to do is enforce 13 the rule, or perhaps as dealt with through 14 training, or quidance, or handbooks. The 15 rule-making process is really long. And so we have to pick those -- you have 16 17 to pick those carefully in terms of, we only get 18 so many points with all the different steps of the 19 review process. Because we're competing with every other program, and every other agency for 20

limited capacity at OMB, limited capacity at USDA.

In all the different offices, I have to look at

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And there's -- there is the all these rules. 1 2 reality of political cycles, the reality of through 3 put, and what can make it through all these different offices. 4 So that's why sometimes we don't move 5 6 ahead with rule making. I do think we want to be -- I want to make sure that we're communicating 7 more actively about when priorities change and why 8 9 they change. Because we're all learning as we move here, and we're all learning what works, and we're 10 11 all learning what doesn't work. And I think as 12 long as we're all willing to learn together, we're 13 going to be fine. 14 MR. POWELL-PALM: Ryan, please go 15 ahead. MR. CALDWELL: Well, Jenny, thanks so 16 much for sharing all this with us. 17 I cannot 18 believe how many balls you have in the air. 19 just shocking to me, but, you know what I mean, 20 amazing job with it. I hope this can be -- hope quick. You mentioned that more 2.1 ti can be 22 information was needed in order to move the whole

1	hydroponics issue forward. But I'm wondering if
2	you can just elaborate briefly on exactly what
3	types of information are needed there?
4	DR. TUCKER: So this is there was
5	a 2010 recommendation on containers, so it's often
6	kind of referred to hydroponics and containers,
7	that's often referred to. When you actually read
8	the recommendation, there's not a lot of detail.
9	It's a fairly short part of that recommendation.
LO	And so standards, you know, container standards
L1	would be so if we worked on container standards,
L2	somebody suggested a few suggested in the
L3	comments that it would need to be, like, a separate
L 4	section of the regs.
L5	For example, if there was a separate
L 6	section of the regs. There's a lot of technical
L7	work that would need to go into that. And so
L8	and to defining what those standards would be for
L 9	those types of production systems. We do not, at
20	the program level, have that level of expertise.
21	So the task force we did have a task force that
22	worked on this issue before the Board voted on

I think it was 2017. So there was a lot of work that went 2 3 into that task force, but a lot of that work was on sort of the pros and cons of the system. 4 what the standards would actually be, what those 5 producers would actually have to do to comply. 6 And we don't have that technical -- we have the 7 regs that bind us all, and a shared set of standards 8 9 that bind us all. But I think the point or the feedback has been they need to be more specific 10 11 in order to ensure consistency and fairness. 12 And that's where I think a process would be needed to articulate what those standards would 1.3 So right now, the USDA organic standards do 14 15 govern that system, but more specificity would help implement them more consistently across different 16 production systems, because systems are different 17 18 in different parts of the country. So that kind standards development work at a 19 of level of 20 granularity is needed that we don't have right now. MR. CALDWELL: Thanks. 2.1 Great. 22 MR. POWELL-PALM: Thank you, everyone

hydroponics.

1	for those questions. And thank you, Jenny, for
2	fielding such a wide variety of questions all at
3	once. Really appreciate your insight, and you
4	said you can get us into the program on that. All
5	right, folks, we are right pushing up to lunchtime
6	well, actually, pushed well past it. So thank
7	you for the great conversation.
8	Let's come back at half past the next
9	hour. So it's 43 after right now. Let's give
10	ourselves about 45 minutes for lunch. Livestock
11	is looking pretty lean, so we'll be all right, I
12	think, on timing. So let's plan to come back half
13	past the hour in whatever time zone you're in.
14	And we'll pick up with livestock right after that.
15	(Whereupon, the above-entitled matter
16	went off the record.)
17	MR. D'AMORE: Yeah. Well, you've got
18	a long history with the organics, and it's nice
19	to see that some of us just have a long history
20	with an aspect of farming or handling. And it
21	doesn't always have to be or have been organics.
22	And as I said earlier today I was doing all of

1	that before organics was born.
2	And by the time it was born, was getting
3	enough traction from, you know, hydroponically
4	grown or living lettuce, or whatever you wanted
5	to say. But there there's no doubt that this
6	organic seal was something precious and something
7	we have got to continue to nurture. Yeah. Okay.
8	Well, I'm going to stop yacking and get my desk
9	straightened up, and thank you for responding.
LO	MR. POWELL-PALM: Thank you.
L1	MR. D'AMORE: Yeah. Take care.
L2	MR. CALDWELL: Jenny, thanks for that
13	quick answer on that last one, I was worried about
L 4	asking yet another question as we went in to our
L 5	lunch, but you made it very quick, so that's great.
L 6	DR. TUCKER: Great questions today.
L7	I enjoyed the discussion.
L 8	MR. CALDWELL: Your answer your
L 9	detailed answers were wonderful, and like I said,
20	I can't believe you can carry all that in your head.
21	That's amazing, so
22	DR. TUCKER: I got to tell you, I love

1	what I do, and I love us and that makes all the
2	difference in the world.
3	MR. CALDWELL: Great. Great.
4	MR. POWELL-PALM: All right. Welcome
5	back, folks. Half past, whichever hour you are
6	in, so hope everyone got a little sustenance to
7	keep us through the afternoon. We're going to be
8	jumping right into livestock subcommittee. And
9	this is going to be a fairly quick run-through,
10	because we are not voting on any of the materials.
11	We're just hearing from the board members who have
12	taken on becoming experts in these materials. So
13	I'm going to hand it off to Kim Huseman, the
14	chairperson of the livestock subcommittee. And
15	we'll go from there. Kim, all yours.
16	MS. HUSEMAN: Thank you, Nate.
17	Welcome, everybody back this afternoon. The
18	livestock subcommittee currently has a fairly
19	light agenda. We do have six sunsets, though, that
20	will be presented for voting in the fall. And it's
21	been about six months since we've gone through
22	these, so bear with us as we get our cadence down.

But we're going to start with the first sunset review, which will be chlorhexidine.

And I am actually also the lead for this particular sunset review. So I'll go ahead and hand it over to Kim. So we'll go ahead and get started here then on our first that review, chlorhexidine. Chlorhexidine is listed under 205 603(a) as a disinfectant, sanitizer, and medical treatments as applicable. For medical procedures conducted under the supervision of a licensed Allowed for the use as a teat dip veterinarian. when alternative germicidal agents, and/or physical barriers have lost their effectiveness.

Do want to point out that in the initial sunset review, we used the word surgical procedures. However, as per the national list, medical procedures under -- conducted under the supervision of a licensed veterinarian is the most technical verbiage. So in reviewing the written comments, and actually -- and oral comments during last week, did get a dozen responders for chlorhexidine.

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majority of 1 The the responders, including two veterinarians, did speak in the 2 3 affirmation to keep chlorhexidine on the national list as a medical procedure used by a veterinarian. 4 And spoke very highly of the necessity in those 5 particular time periods, as well as a significant 6 7 utilizing chlorhexidine support for an alternative teat dip when other asked -- or when 8 9 other products are not as effective. We'll note that there was some comments 10 11 regarding the use of a teat dip needing to be 12 analyzed, and the review of the annotations should revert back to only for medical procedures. 13 Essentially stating that necessity and natural 14 15 alternatives being sufficient. However, dairy 16 saying that, both operators and 17 veterinarians have supported the use of it as a 18 alternative to a teat dip when other germicidal 19 agents are not responding. That was essentially the review for 20 Any comments or questions? 2.1 chlorhexidine. All 22 right, seeing none, we will move on to glucose.

1	And for let's see, I'm sorry. I have
2	tolazoline, sorry, listed next here, on on page
3	or on paper at least. And so tolazoline will
4	be Amy.
5	MS. BRUCH: Okay. Thank you, Kim.
6	Tolazoline, so we're at 205603, and this is part
7	A as disinfectant, sanitizer, and medical
8	treatment as applicable. And then tolazoline goes
9	on to say federal law restricts this drug to be
10	used by whereon a lawful written, or oral order
11	of a licensed veterinarian in full compliance with
12	the AMDUCA, and the FDA regulations.
13	And then also for use under 7 CFR part
14	205, it requires, one, used by or on the lawful
15	written order of a licensed veterinarian. Two,
16	use only to reverse the effects of sedation caused
17	by xylazine. And three, a neat withdraw period
18	of at least eight days after administering to
19	livestock intended for slaughter, and a milk
20	discard period of at least four days after
21	administering to dairy animals.

So there's quite a few restrictions

1 with this substance here. There's quite a bit of 2 information out manufacture, on use, 3 international allowance. Currently right now, tolazoline is not listed as improved substance 4 5 internationally or on food Χ, or IFO. 6 Environmental issues with this particular 7 substance is -- there's no published toxicity or carcinogenic studies on the toxicity or lethal 8 9 dosage of tolazoline. It is, though, listed by the EPA as an 10 11 inert ingredient. The main question we had for 12 stakeholders on tolazoline is just if there were 13 any new non-synthetic substances that could be used reverse the effect of xylazine and other 14 15 sedatives as effectively as tolazoline. So that particular question in general, the community --16 17 most folks were stating that they were unaware of 18 any additional substitutes for this particular 19 product. 20 But there was one commenter out of all of them that did comment that mentioned there were 2.1 22 two substances that could potentially be used, but

there is not a history of them being used with 1 regularity in farm animal medicine. So that was 2 3 basically the answers and substitutions. And then comments in general, just to summarize those, 4 5 tolazoline and xylazine are always used together. So there was a comment to say, can we review these 6 7 two in concert during the sunset process. thought that was interesting. 8 9 Another commenter mentioned that 10 keeping emergency treatments such as xylazine and 11 tolazoline on the national list will allow working 12 livestock producers to both provide emergency care to sick animals and maintain their organic status. 1.3 So all the comments were generally in favor of 14 15 keeping this on the list. 16 The last thing, and this might be 17 something to asterisk for address during xylazine 18 just there's conflicting sunset, some was 19 information between the usage from an FDA 20 standpoint and the AMDCA. So that is something that the Board wrestled with a little bit back in 2.1 22 2015, when the last time this was reviewed.

1	then in the tap there is some information that leads
2	us to believe that maybe we want to take this up
3	as a work agenda item to kind of dive into those
4	conflicting view points on the usage of xylazine.
5	So if there's conflicting uses to xylazine, then
6	that would impact tolazoline. Amy.
7	MS. ARSENAULT: Any questions for Amy
8	on tolazoline. Not seeing any hands go up. We
9	will move forward. The next sunset review is
LO	copper sulfate, and this one belongs to Nate.
11	MR. POWELL-PALM: All right. Thank
L2	you. So we have copper sulfate. It's on the
13	national list of allowed synthetic substances for
L 4	use in organic livestock production under 205.603,
L5	as a topical treatment, external parasiticides,
L 6	or local anesthetic. Overall, comments,
L7	especially from producers, primarily dairy
L 8	producers, were in favor of retaining this
L 9	material. And that is an essential tool in the
20	toolbox.
21	The uses of copper, as we've discussed
22	in kind of across the sub-committees, is tricky.

1	We do understand that it's a potential contaminant
2	for the environment. And we're always looking for
3	ways to identify other materials that might be able
4	to serve the same purpose, while maintaining animal
5	welfare and efficacy.
6	So as we look to alternatives, we did
7	hear more talk about zinc, and identifying animal
8	welfare practices that might reduce the outbreak
9	of problems, especially in cattle production.
10	It's something that I would love more input as we
11	move into the fall meeting. But also thank you
12	to all of the commenters who did bring really good
13	information about their operations and their
14	communities' operations on this material.
15	MS. BRUCH: Thank you, Nate. Any
16	questions for Nate on copper sulfate?
17	MR. POWELL-PALM: I think Jerry has
18	one,
19	MS. BRUCH: Oh, Jerry.
20	MR. D'AMORE: Not so much a question,
21	but a willingness to share with you a brand new
22	TR on this subject that's going to be coming in

Τ	within a month. It's supposed to be 65 pages long.
2	But that's not how you judge a content. But I'm
3	I concur with what you said. We are aware, it
4	prompted us to the certainly at the crop
5	subcommittee to go ahead and order another TR and
6	I just would like to emphasize, as you said, across
7	subcommittees, it's something certainly we are
8	keeping our eye up.
9	MR. POWELL-PALM: Thank you for that.
10	Javier has a question.
11	MR. ZAMORA: Yeah. I'm just having a
12	little bit of a hard time hearing some board
13	members, like Jerry, the last one. I can hardly
14	hear him. And I think he's speaking maybe too
15	softly.
16	MR. POWELL-PALM: I think Jerry's mic
17	picked up for me a bit. It was a little cloudy
18	this morning, but it definitely got has
19	improved.
20	MR. D'AMORE: Javier, I would like
21	I don't know what to say to that other than talking
22	louder, and that's what I'll do.

1	MS. HUSEMAN: We can hear you better
2	there, Jerry.
3	MR. D'AMORE: Thank you all.
4	Appreciate it.
5	MS. HUSEMAN: All right. Any other
6	questions for Nate? Seeing none, we'll go ahead
7	and proceed. And the next sunset review is
8	elemental sulfur. And elemental sulfur belongs
9	to Brian.
10	MR. CALDWELL: Thanks, Kim. And I'm
11	usually criticized for talking too loud. So if
12	I'm too loud, Javier, just let me know. So we're
13	going to look at sulfur. And sulfur is used for
14	many different purposes in organic agriculture.
15	And this is at 205.63 B, as a topical treatment
16	for synthetic substance used in organic livestock
17	production.
18	And basically, the comments are were
19	pretty much not not 100 percent in favor, but
20	I have, in my count, I had eight in favor of
21	relisting, and one saying more review was needed,
22	and one against saying that it was not essential.

1 The question that we asked was: Are alternatives that sufficient to control 2 are 3 external livestock pests? And basically we got no answer to that. We did get a listing of some 4 materials that could be used, but there was no 5 6 information about efficacy. 7 So essentially, in 2,000 -- the first time that this was proposed for use, it was added 8 9 to the national list in 2019, and at that point, 10 some livestock folks were saying that it was really 11 an important need for their systems. So we got 12 -- we have that in favor of it being essential, 13 and then one person saying -- or one group saying that it was not essential, but no information about 14 15 any efficacy of alternative controls. So I think -- just looking to see if there's any other -- any 16 aspects that I wanted to bring up. Otherwise, I 17 18 think it's pretty straightforward. 19 questions on that one? 20 MS. ARSENAULT: Okay. Seeing no hands raised for Brian for elemental sulfur. Well done, 2.1

Go ahead and move forward to lidocaine.

Brian.

1	And lidocaine goes back to you, Nate.
2	MR. POWELL-PALM: Thank you. So
3	lidocaine is used as a topical treatment for
4	external parasiticides or local anesthetic.
5	Mostly as we've heard, lidocaine is used for pain
6	relief, especially in the dehorning of cattle.
7	And I think lidocaine is one of those materials
8	in the organic toolbox that helps keep organic
9	really at the forefront of animal welfare.
10	And I think we heard that that dehorning
11	and horn management in especially dairy cows, is
12	a common practice that we all have to deal with.
13	But having this tool available to reduce pain and
14	suffering is very much in line with OFPA. And that
15	was echoed in the public comments, both written
16	and oral.
17	MS. HUSEMAN: Thank you, Nate. Are
18	there any questions? All right. Seeing none,
19	we'll move forward to glucose. And glucose is the
20	last sunset item for livestock. This one belongs
21	to Liz. So Liz, your first sunset review process,
22	take it away.

MS. GRAZNAK: All right. I appreciate 1 2 Nate's confidence in all of us in that we become 3 very knowledgeable about these subjects. is a synthetic substance allowed in 4 5 organic livestock production for medical 6 treatment. For animal health purposes, it is 7 primarily used as an aid in treatment of cattle into negative energy balance, 8 when they go oftentimes after calving. 9 And this is also, well, it's known as 10 11 ketosis, And glucose is a remedy for dehydration 12 as well in cows and horses. My veterinary friend 13 likened it to humans drinking orange juice when we need an energy boost. The main question that 14 15 we had for stakeholders was whether or not other substances are available for the treatment of 16 17 ketosis. 18 And if it is an equally necessary and 19 effective tool for organic farmers for treatment of all stages of the development of ketosis. 20 2.1 Generally, the comments that we got back, which weren't very many, were from the community that 22

1	they emphatically support the need for the use of
2	glucose, and that it definitely should remain on
3	the national list without further annotation.
4	MR. POWELL-PALM: Nice work, Liz.
5	MS. HUSEMAN: Great job, Liz. All
6	right. Any questions for Liz on glucose? All
7	right. Seeing none, we have concluded all of the
8	sunset reviews for the spring meeting in the
9	livestock group.
10	MR. POWELL-PALM: Fantastic. Thank
11	you, Kim. One thing I will just throw in there
12	leading onto Liz's comment. It is a pretty tall
13	order. When you are a board member, you come with
14	certain expertise, and you may not be assigned
15	subcommittees that reflect your expertise. So
16	say, Liz is primarily, to my understanding, a
17	vegetable grower. She doesn't deal with cows, but
18	she has to learn a lot to be a good digester of
19	information on behalf of the community.
20	So I think some folks jump on the Board
21	thinking I'm just going to really bring my
22	expertise to the subcommittees that most align with

1	my experience. Unfortunately, that's not always
2	an option. We need folks to serve on all the
3	committees. So thank you, everyone, for going
4	outside your comfort zones and doing really good
5	work.
6	Next up, we're going to be moving on
7	to compliance, accreditation, and certification
8	subcommittee. I love reading that out because I
9	always say CACS, and I really never remember what
10	it stands for. So compliance, accreditation,
11	certification subcommittee, and this is chaired
12	by Amy Bruch.
13	MS. BRUCH: Hey, thank you, Nate.
14	First off, I just want to extend a sincere
15	appreciation to the subcommittee for the
16	authenticity and diversity of perspectives that
17	allow for valuable discussions on our work agenda
18	items. And due to that robust deliberations that
19	we do have, we're looking to extend our meeting
20	time to just process more of these subjects that
21	are important to the community.

I also wanted to extend a thank you to

the stakeholder community who engaged in this 1 process to provide us with real, genuine, and 2 3 insightful comments on our work agenda. fall semester, we'll be continuing our work on 4 these current agenda items, as well as adding to 5 Work on the memo that was delivered to 6 the list. us by the NOP in regards to organics and climate 7 smart agriculture. 8 9 So that kind of furthers the work that Carolyn did last semester, and she'll be the lead 10 11 on that. One public comment to mention before we 12 get started is, debate is healthy and allows us for opportunities to strengthen a foundational 13 principle of oversight in the organic system. 14 15 With that said, we have approximately 60 minutes and three topics to cover. 16 17 So we'll plan on trying to spend about 18 15 to 20 minutes on each one. And I'll work on 19 prompting a five-minute warning just to try to keep 20 us on track for each topic. So with that, Kyla, I will turn it over to you first. 2.1 22 MS. SMITH: Thanks, Amy. So the first

proposal we have to talk about is the NOP's risk 1 2 mitigation table. So the NOP sent the board a memo on November 18 asking us to review the risk mitigation table that was developed in response to the 2020 peer review conducted by ANSI. 5 6 table seeks to document the ways that safeguards impartiality in the delivery of their 7 services according to ISO 17011. 8

CACS reviewed the table and did not identify additional conflicts to be added. The CACS did ask stakeholders to provide feedback on it -- on two specific things. The questions are listed on the screen there. So firstly, to provide feedback on if there were any conflicts that were missing, and also also to provide feedback on if any conflicts were unclear.

The public comment received was appreciative of the opportunity to provide this feedback. There were some areas that commenters identified as missing. And a few areas for further clarification. Most of the commenters stated that the table did a good job at covering conflicts of

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interest, like, specifically related to, you know,
personnel and decision making.

However, they identified that the areas that were missing were more related to other types of risks related -- or risks of impartiality. So I think we have a couple of options here, as the Board. We can -- I don't know that we're going to have the time in -- to debate all of the areas that were identified in the public comment, and parse through them all here today.

So we can either vote to move the proposal forward. And if the proposal would pass, then we can include a write-up in the cover sheet that the board recommend that the NOP include the suggestions that were identified in the public comment in the risk mitigation table. Or we can send this back to subcommittee, to further discuss each of the suggestions made in the public comment, and, like, sort of pass through them, in order to make a determination on whether or not we think that they should be included. And then come back with that more comprehensive proposal in the fall.

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1	So let's talk about those options.
2	MR. POWELL-PALM: Who wants okay,
3	Brian, please go ahead.
4	MR. CALDWELL: I'm pretty strongly in
5	favor on sending this back to the committee. The
6	way I see it, the table just does actually not
7	include all the potential conflicts of interest.
8	And so I think it's kind of directly against
9	even if we put a whole bunch of caveats into the
10	cover letter, it would actually sort of make the
11	actual decision false. So I would like it to go
12	back, and I think there's plenty more to talk about
13	here.
14	MR. POWELL-PALM: Other thoughts?
15	Amy, please go ahead.
16	MS. BRUCH: Yeah. Kyla, I appreciate
17	your work on this. I think, you know, as is it
18	does communicate needed information. However, I
19	think part of the comments from the stakeholder
20	community in expanding the scope, I think that
21	there is additional work that could be warranted
22	on this. So I would echo Brian to take it back

to subcommittee and work on a little bit more 1 2 expansive approach on this really important table. 3 And then I really took note and Jenny also mentioned this in her remarks about the 4 5 community talking about the importance of 6 handbook and where some of our best practices land, and then the regulations. And just -- I don't know 7 if that'll be in scope in this during the second 8 But I thought just that's an important 9 10 thing for the community and our board to digest, 11 because best practices are voluntary, and the 12 regulations are really where the enforcement and legal actions take place. So internalizing that 13 information potentially in this chart might be 14 15 helpful as well. 16 MR. POWELL-PALM: Rick? 17 I agree with the two MR. GREENWOOD: 18 previous commenters. I don't think there's a 19 And I think it's better great rush to do this. 20 with a lot of these things that we look at, that we get it right because we don't get another shot 2.1

at it for many years sometimes. So a little extra

1	time in the subcommittees, I think, is well worth
2	it to get it as close to accurate as possible.
3	MS. SMITH: Anybody else have
4	thoughts? Go ahead, Kim.
5	MS. HUSEMAN: I was actually looking
6	for the clapping emoji, but we don't have it.
7	MS. BRUCH: I mean, unless anybody else
8	has any other comments or thoughts, I would go ahead
9	and make that motion, but don't want to rush that
10	conversation.
11	MR. POWELL-PALM: So we have a motion.
12	Oh, sorry. Go ahead, Jerry.
13	MR. D'AMORE: Thank you-all. At this
14	point, there's no other alternative from my point
15	of view. The slow down here is comments from our
16	stakeholders, and for me at least, there's been
17	no debate on those comments. So I would go right
18	along with the flow and support that motion then.
19	MR. POWELL-PALM: Okay.
20	MS. SMITH: Brian?
21	MS. ARSENAULT: Would somebody please
22	just reiterate the motion?

1	MS. SMITH: We didn't make the motion
2	yet, so I will make it, but I just didn't want to,
3	like, cut so basically it would just be a motion
4	to go back to subcommittee. So we're just talking
5	about the options at the pass. And like and
6	I agree, it felt a little uncomfortable to me to
7	just put, you know, hey, but it looked in the cover
8	sheet without us talking through those each of
9	the suggestions, so I I'm in agreeance with that.
10	Go ahead, Brian.
11	MR. CALDWELL: Yeah, I just wanted to
12	say that I really appreciate the committee going
13	through this. This is really tough tricky
14	stuff. And I think it's a great example of how
15	the organic community can really can really
16	expand our reach and help us out. So I just want
17	to put those things out there, and thanks all for
18	work on a difficult topic.
19	MS. SMITH: Yes. I would 100 percent
20	second that. I am not an expert in the world of
21	ISO, and so I'm really grateful to the stakeholders
22	who are more knowledgeable on that area and car

1	provide us some really instructive and valuable
2	feedback. Okay. I would make the motion to send
3	the risk mitigation table back proposal back
4	to subcommittee.
5	MR. POWELL-PALM: All right. We have
6	a motion. Do we
7	MS. BRUCH: I second it.
8	MS. SMITH: Okay.
9	MR. POWELL-PALM: So our first vote
10	back to subcommittee. And we'll just be starting
11	going alphabetically. We move forward one persor
12	each time we take a vote. So we have a motion or
13	the floor to go back to subcommittee, motion by
14	Kyla seconded by Amy. So Amy, you're the first
15	vote.
16	MS. BRUCH: Yes.
17	MR. POWELL-PALM: All right. Brian?
18	MR. CALDWELL: Yes.
19	MR. POWELL-PALM: Jerry?
20	MR. D'AMORE: Yes. Thank you.
21	MR. POWELL-PALM: Carolyn?
22	DR. DIMITRI: Yes.

1	MR. POWELL-PALM: Rick?
2	MR. GREENWOOD: Yes.
3	MR. POWELL-PALM: Liz?
4	MS. GRAZNAK: Yes.
5	MR. POWELL-PALM: Kim?
6	MS. HUSEMAN: Yes.
7	MR. POWELL-PALM: Mindy?
8	MS. JEFFERY: Yes.
9	MR. POWELL-PALM: Allison?
10	MS. JOHNSON: Yes.
11	MR. POWELL-PALM: Dilip?
12	DR. NANDWANI: Yes.
13	MR. POWELL-PALM: Logan?
14	MS. PETREY: Yes.
15	MR. POWELL-PALM: Thank you. Kyla?
16	MS. SMITH: Yes.
17	MR. POWELL-PALM: Wood?
18	MR. TURNER: Yes.
19	MR. POWELL-PALM: Javier?
20	MR. ZAMORA: Yes.
21	MR. POWELL-PALM: And the the board
22	chair votes yes. So unanimously, we are sending

1	it back to subcommittee. Is that the right tally
2	you got? I should always check with you, Kyla,
3	15 and all?
4	MS. SMITH: 15 15 yeses, there were
5	no zero abstentions, refusals.
6	MR. POWELL-PALM: Fantastic
7	MS. ARSENAULT: Okay. Thank you,
8	Kyla. I appreciate that. We'll move on to our
9	next agenda item, and that's by Jerry.
10	MR. D'AMORE: And I am unmuted, and
11	thank you for the introduction. How about the
12	volume? Are we all right here?
13	MR. POWELL-PALM: Sounding good.
14	MR. D'AMORE: Okay. So Human Capital
15	Management, supporting the work of the NOSB. Then
16	you referred to a document titled as NOSB technical
17	support initiative, but they are one and the same
18	initiative. The notion that the work load carried
19	by the NOSB board members can be daunting, has been
20	around for a long time. And this discussion
21	document has its origins in the fall 2020
22	discussion document titled human capital strategy

for organic inspectors and reviewers. That's where it all started, under the 2 3 caption of human capital. The board meeting of last spring, one year 4 ago, discussion document, again under the heading of 5 human capital with a specific extension of that 6 7 saying supporting the work of the NOSB. document contained in the spring 2020 binder 8 9 reflects the CACS's desire to get feedback 10 concerning NOSB technical support, specifically. 11 And I'm going to spend the rest of my time talking 12 about the comments, because I find them to be extremely good and extremely revealing. 13 So there were 19 -- excuse me, 17 total 14 15 responding to 2020 commenters the spring discussion document. About a third were oral and 16 17 two-thirds were written. And most of these 18 stakeholders did respond to all four questions. 19 And this one I got underlined, all of stakeholders were in favor of some form of support 20 for the NOSB. 2.1

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What are the advantages or disadvantages 1 answers. of having support come from within the government 2 3 or from a non-profit or university? First answer. no to any US government support, as it would threaten the NOSO -- the NOSB's autonomy. 5 6 second one was no to USDA support. And that's 7 quite a distinction, as it does threaten NOSB autonomy can -- according to this commenter. 8 9 Yes to inside support, but it should be limited to career scientists within the USDA, 10 11 EPA, and FDA, who themselves could work with land 12 grant universities. The public at large should 13 be part of a support team through the use of the Support should come from within the 14 open docket. 15 USDA, as there is too much knowledge to be ignored. Next, is expand your thinking to include the 16 organic community. And then the last one, the last 17 18 answer, regardless of where the technical support 19 comes from, the NOP should be responsible for all contracting activity. 20 The next question, what NOSB tasks, if 2.1 22 any, are critical to keep completely independent

1	of the support team? The support team should not
2	deliberate or decide an issue. They should not
3	write final proposals. They should not be voting
4	or arguing for or against anything. They should
5	not draft recommendations, discussion documents,
6	or other Board documents. They cannot be the
7	primary author or of a subcommittee document.
8	They cannot initiate poles of
9	stakeholder groups. They cannot communicate on
10	behalf of the NOSB or any subcommittee. The
11	support should support group should vet and
12	review materials and documents for regulatory
13	accuracy. I'm going to ask you to remember that
14	term, regulatory accuracy. We'll get to that in
15	a moment.
16	Number 3: should the support team be
17	privy to all subcommittee meetings and
18	discussions? There's four people or four groups
19	answered that, and they all basically said, yes,
20	when it pert when they're discussing things that
21	pertain to where you're being active. So I won't
22	read all four of the answers.

1	The fourth question, what should be the
2	scope of the NOP's relationship with the
3	contemplated support group, i.e. should they be
4	able to task the group directly? First answer,
5	the NOP should not be able to task the support group
6	directly. The next answer was no, period. The
7	next, the NOP should administer the program by
8	setting up contracts and making payments, et
9	cetera. But the individual NOSB members should
10	create the work plan. Direction of the technical
11	support team should only come from the NOSB.
12	So those were the answers to the
13	questions, but they're not where I found the most
14	interest. They were good. But there are some
15	random ones that did not address questions, and
16	there's only five of those. And I'm going to read
17	them to you. Create more time for critical
18	thinking and reflection by going through this
19	process. Use the endeavor to broaden the pool for
20	a more diverse NOSB membership.
21	Make more and better use of your
22	technical advisory panels. This initiative must

1	equip the NOSB to provide NOP with clearer, more
2	legally sound and actionable recommendations.
3	You might find backlogs disappearing. This is a
4	two-way street, managing the NOSB is a huge task
5	for the NOP. And my last one is just one sentence
6	from a former board member that says, this
7	initiative is long overdue, and if well done, could
8	greatly enhance the work of the NOSB. Thank you
9	for your time.
10	MS. BRUCH: Thank you, Jerry, for your
11	overview on that. I will open it up to any
12	questions.
13	MR. D'AMORE: I guess pretty thorough.
14	MR. POWELL-PALM: Looks like Carolyn
15	has a question.
16	DR. DIMITRI: It's not so much a
17	question as a comment. I mean, I wonder I try
18	to think of, like, appearances of impropriety or
19	conflict. And I think it would be very hard to
20	have someone working for USDA and not at least
21	giving the appearance of a conflict.
22	MR. D'AMORE: Yeah. I think conflict

of interest is probably the number one inhibiting 1 discussion item. 2 And I quess my response is --3 not to be cavalier, but my response is: I think on this one that the juice is worth the squeeze, 4 5 and we got to find a way to do it. That's the way I would answer that. 6 And being totally transparent, I think 7 we could manage that. But I was given this in 8 February, thinking what the heck is it? And I've 9 fallen in love with the notion, so I can't -- vou've 10 11 got to discredit me -- or discount, excuse me. 12 DR. DIMITRI: Well, I quess I have another thought, too. And, you know, I guess maybe 13 because I'm in my position at the University, I 14 can actually hire a student to do, I think, a lot 15 of these activities that we're talking about having 16 available to other people. So in a way, I mean, 17 I think what -- I like having a person who is just, 18 like, my person and I ask her, hey, can you do this? 19 And it's, like, very defined and very tight. 20 And so I just wonder if there is another 21 22 way to do this without having to go through USDA,

1	because I do think about all of the medical conflict
2	of interest and industry conflict of interest.
3	And I think the research shows again and again that
4	people think that they are never biased, but
5	actually they are, because we just are unable to
6	accurately assess how influenced we are by things
7	external to us. And then I'm going to stop talking
8	now, because I know I'm lucky.
9	MR. D'AMORE: Thank you for saying
10	that. Yes, you are.
11	MS. BRUCH: Thank you, Carolyn.
12	Allison, go ahead. I see your hand up.
13	MS. JOHNSON: Thank you. I had kind
14	of a similar thought to Carolyn, and I appreciate
15	that I'm quite green coming into this late in the
16	process. So, hopefully this will makes sense, so
17	I haven't missed something major. But it seems
18	to me that members of the board will have different
19	needs and could benefit from different types of
20	support, given our broad range of backgrounds, and
21	expertise, and work lives.
22	And I I'm especially interested in

Τ	finding ways to improve representation of
2	different perspectives on the board, and diversity
3	in the organic sector. So one thing I didn't hear
4	here was maybe assistance in hearing a broader
5	range of perspectives or from stakeholders who we
6	might not interact with directly sort of a
7	different type of technical expertise that I wonder
8	if there's a way to encompass that here as well.
9	Assistance with diversity, equity, and inclusion
10	issues and ensuring that we have those types of
11	resources at our fingertips.
12	MR. D'AMORE: Yeah. Allison,
13	actually, I meant to capture that. And then if
14	this doesn't do it for you, I'll do a better job.
15	Use this endeavor to broaden the pool for a more
16	diverse NOSB membership base. So I and you
17	know, everything that we're talking about is part
18	of what is embedded in this proposal. And to the
19	points that you both well, particularly you
20	Allison, just made about well, excuse me, it was
21	also Carolyn.

Some of us have resources, some of us

Τ	don't. Some of us have inhate expertise, some of
2	us don't. So the question really there is: How
3	do we parcel out the resources that we might get
4	to fit the needs of our entire group. And, you
5	know, in subcommittee we were kicking around the
6	notion, well, maybe this should be mostly a chairs
7	bucket of resources, that could be then parceled
8	out amongst the subcommittee.
9	There are 100 different answers. And
10	I actually thank you, Allison, because if it wasn't
11	strong enough emphasized that this is in my mind
12	a significant potential road towards inclusion,
13	more than anything that I've seen come across in
14	my going on three years now, so thank you for the
15	comment.
16	MS. BRUCH: Thank you, Allison. Rick,
17	is your hand up?
18	MR. GREENWOOD: Yeah. Thanks. I
19	guess a lot of it depends in this term, conflict
20	of interest on what we expect these people to do.
21	I mean, for some of the work that we do, it's highly
22	technical. And I think that technical expertise

1	sometimes comes from people that work in industry.
2	And so very different than, I think because
3	I can get graduate students too, but usually they
4	don't have the expertise to do some of this work.
5	They can do more stat work, or you can
6	have them get literature reviews and things like
7	that. But for some of the work that would be in
8	a sense, like a TR, you really need people that
9	have been in the industry that know the impacts,
LO	or they have been growers. And all of those
11	people, I think, come with a bias. And I think
12	if you recognize NOSB membership, we come with a
L3	bias. That's part of who we are, we represent some
L 4	of these groups.
L5	So it really is a tough call, and I know
L 6	I've seen Jerry struggle with it, but it's a tough
L7	one to answer. And I think there is concern,
L 8	though, that if we go down this path, which I think
L 9	we really need, our stakeholders are going to be
20	very concerned about who we get to help on this.
21	MR. D'AMORE: Okay. I guess I read
22	fast. And this is not to negate what you just said.

2	in my going on to three years, I've never been
3	handed something where there was a universal
4	stakeholder response of, get it done. Trying to
5	put a you say, hey. They all have their
6	different ways of getting towards a solution, but
7	not one person stood up and said, I think it's a
8	bad idea.
9	MS. BRUCH: Yeah, great point. Thank
10	you, Rick, for your comment. And I'm going to just
11	indicate a five-minute warning. So Kyla, is your
12	hand up?
13	MS. SMITH: Thanks. I think my
14	comments are similar to Rick's in that, you know,
15	I feel like when we originally started talking
16	about this, was in the wider conversation of human
17	capital. And there was, like, the RFP that got
18	put out. And there was no proposal submitted for
19	this topic within that wider context.
20	So then I feel like we, you know, we
21	were trying to think about, like, other options
22	because, you know, it was discussed about, like,

Rick, because I agree with every bit of it. But

1	you know who, what non-profit, or a university,
2	or non-government entity could actually do what
3	we were asking them to do. So it didn't seem like
4	that was, like, a viable pass, right?
5	And now there's seemingly some concerns
6	about oh, well, if it's housed within USDA, there's
7	conflict of interest concerns or whatever. And
8	so I guess I'm just struggling a little bit to
9	it doesn't sound like there's, like, a shining,
10	like, blinking, like, this is the best thing. This
11	is what we ought to do. And so we're just going
12	to have to pick what we feel like is a viable option
13	and, like, try to put some guardrails around it,
14	I guess, because it doesn't seem like there's,
15	like, I don't know.
16	Yeah. The bright shining star of,
17	like, this is how we should head. It seems like
18	there's things we need to work out and consider
19	no matter which path we take.
20	MR. D'AMORE: I entirely agree with
21	that. For me the blinking light was the an oral
22	commenter who actually got to the point of saying

1	that, gosh, he thinks their organization would be
2	willing to contribute towards anything that led
3	to, at that point, diversity. But there's no doubt
4	that this initiative is going to be fraught with
5	the necessity to be squeaky clean and transparent.
6	There's just no and how we go about
7	it. So I'm at a loss right now just in terms of
8	where do we go from here? Do we just can we
9	say, hey, we'll talk about this further? Gosh,
10	and gee wiz, thank you for presenting that, but
11	it's too risky, where what's the next step?
12	MS. BRUCH: Yeah. I think, Jerry,
13	that's a good
14	MR. D'AMORE: I'm sorry. That's a
15	procedural question.
16	MS. BRUCH: Sure, no, that's a good
17	question. I think you made mention that and
18	I'm jumping in here, sorry that the community
19	as a whole is in favor of this. So the what, you
20	know, we have almost 100 percent in favor of doing
21	this. The how, I think, is what we have to focus
22	on, kind of the next round of this for sure.

1 Javier, and then I see Nate.

2 MR. ZAMORA: Yeah. It's not an easy 3 fix, but it can be somehow tailored to the need of someone like me. I'll tell you why. 4 I have the knowledge for growing things. 5 probably communicate myself okay. But when it 6 7 comes to the actual technical clerical knowledge, it's really, really hard. Something needs to be 8 9 done within the NOSB, not the NOP or the USDA, 10 because that would be a very big conflict of 11 interest.

Maybe I could go to someone like ALBA, or another non-profit. If I go to a non-profit that has, you know, different ways of making money and actually handle a lot of money, there will be bias. Now, if nothing is done and try to fix this or have the help that someone like me -- well, someone probably that will probably suffer even more than me. To deliver on what's needed, or what this Board is asking us to do, it's going to be difficult.

You will probably not have a good solid

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representation. Or what a mid-size, small family 1 farm or farmer is, especially the Latino or some 2 3 other than Caucasian. Now, I'm afraid that if the person that it's coming on behind me doesn't get 4 the help, it's going to be really hard for the NOSB 5 to have representation that -- it's needed, because 6 you don't have to go far. Just look around and 7 see who the farming community is. 8 9 So I'm coming on at a really good time to perhaps you use me as a quinea pig, if you will, 10 11 to really make something out of this. I think it's 12 100 percent necessary. Because the very first --I can personally tell you that the very first two 13 or three meetings that we had, even right now, I'm 14 15 having a really hard issue navigating the Dropbox and is this PR needed? 16 I'm really even afraid to really -- I 17 18 really commend Liz because she presented 19 And I know I am being asked to present something. something really simple, but I still -- I'm not 20 able to get a good grip of what is it -- how am 2.1 22 I going to present this? Now, does that mean I'm

1	not able to say or read something? No. It's just
2	navigating the steps that I needed to make sure
3	that I feel at least a former point that I'm
4	representing and I'm doing that constituents that
5	had asked me to be part of these board.
6	So I think there's quite a bit of work
7	that needs to be done. But I really, you know,
8	Kayla and Jerry, I think you you're on the right
9	track. We just have to see what that reality is
10	in the farming community and see because I believe
11	the farmer's seed perhaps might be the one or might
12	be the ones that are probably going to struggle
13	more with that. Again, especially the minority
14	part, and I'm here to make it work.
15	MR. D'AMORE: Well said.
16	MR. ZAMORA: I'm sure we'll make it
17	work.
18	MS. BRUCH: Yeah. Thank you, Javier,
19	for your genuine comment there, really appreciate
20	your candor. Liz, we'll wrap up with you for
21	questions or comments.

MS. GRAZNAK: Hopefully, yes. Okay.

I had a really long conversation with a fellow 1 organic farmer right after the end of the listening 2 3 session last week about the exact same topic. I heard from the listening session the comments that people really think that we need to have much 5 6 better representation on the board of a more diverse collection of the organic community. 7 And, you know, more ethically diverse, 8 more financially diverse, just diverse in general. 9 And I came away from hearing that interest in 10 11 wanting to address that topic. Thinking 12 myself, there's no way they will ever get any people from those communities to serve on this board 1.3 because it will not -- it's just not possible. 14 15 It will -- literally isn't possible. I mean, I am having a very hard time 16 giving the time that is required for the board to 17 18 do my due diligence as a board member, because I 19 am that very small certified organic farm that literally depends every single day on me being out 20 in the field, working with my crew, when the carrots 2.1 22 need to be, you know, hand weeded.

I'm still, you know, 1 And Ι 2 employees, thankfully. But any -- I just know that 3 literally there is a huge disconnect I think, between what the board says they want, and actually 4 being able to achieve it because there's no way 5 6 we will be able to represent those communities 7 unless something changes. Thank you so much for being 8 MS. BRUCH: 9 on the board, and sharing that perspective. think we have a lot to review internally in our 10 11 subcommittee, and this is definitely something 12 that's a need. Jerry, do you have any final I wish we had more time as a whole board 13 remarks? in this format to work through some of this. 14 15 I apologize, with our time schedule. But Jerry, just wanted to turn it over to you for any final 16 17 remarks. 18 MR. D'AMORE: Oh, I am -- I'm in awe of the -- of responses. And the only thing I would 19 20 say to you as Chair, is find more time for us to deliberate inside subcommittee. We got to -- we 2.1 22 got a hell of a lot to talk about.

1 MS. BRUCH: Yes. Amen. That's for These are really important topics that this 2 sure. 3 subcommittee takes on, and the comments from the stakeholders are more important now than ever in 4 this forum for our board to deliberate on. 5 This 6 is really important. Okay, well, moving on to our 7 third agenda item. This one is oversight to deter fraud, 8 9 monetization, and supply chain verification. this is actually a collaborative effort between 10 11 myself and Nate. So I'll kind of kick off this 12 and then turn it over to Nate to discuss the second 13 part. And then we'll open it up to questions here. Try to go pretty quick over this overview so we 14 15 have lots of time to hear board comments. Really at the at the fall meeting, 16 17 commenters indicated some steps that the community 18 and the USDA could take in short order to enhance 19 traceability efforts. And today we highlight two. 20 The first one is reporting acres per crop type. And this in general could lead to improved 2.1 22 granular or aggregated mass balances, and can be

a real tool for inspectors. The wide variety of stakeholder feedback, including certifiers, farmers in the plaines community, in relationship to this particular item, generally seemed very supportive or in favor of accomplishing this one way or another.

Currently, there are a few certifying bodies that are capturing this information and placing on organic certificates or addendums right now, but there are gaps in this information since the practice isn't mandatory. In looking at the ACA, they have a document that is entitled, best practices for verifying traceability in the supply chain. And it states that the solution to transparency is that all certifiers submit this type of data, organic acreage reports to the NOP for inclusion in the organic integrity database.

This would enable a clearer picture of whether or not the organic land base supports production claims on small and large scales and allow for calculation of a mass balance across the supply chain. There were a few concerns of just

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how do we go about articulating this information 1 2 for small acreage, multiple crops, just 3 clarification on, just how we're aoina to categorize this information on certificates. 4

But there are currently some best practices in play that could help alleviate the concerns and other commenters were quick to point out about including livestock, these trays and mushrooms, et cetera. So one last comment before I turn it over to Nate, would be that reporting production area information certified by crop, livestock, and location on at least an annual basis to the organic integrity database is one of the most impactful single actions that can be taken to increase the integrity in the global organic control system.

And they also went on to say that they expected this information just to be at aggregated level in the OID, just to help protect confidential business information. So I will pass it over to Nate for any additional information on acres reporting, or the next item up for

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1	discussion, which is universal bill of lading.
2	MR. POWELL-PALM: Thank you, Amy, and
3	thank you for your work on this. I think when we
4	look at the ability to consistently identify red
5	flags in the supply chain for organics, we have
6	one chance every year to have an inspection. I
7	think it's pretty well known that the chance of
8	catching fraud during the inspection is fairly low,
9	just because you're seeing such a snapshot.
10	And so as we heard from many commenters,
11	folks rely basically on crowd sourcing tips. Is
12	there fraud? Does anyone know of fraud? Where
13	is it? And those tips are then sent up the chain
14	to the certifier, and they figure out how to execute
15	an enforcement action. As an inspector,
16	oftentimes, we're trying to figure out, what is
17	a complete story?
18	When we are writing an inspection
19	report, we're trying to give the reviewer and the
20	certifier a narrative of a farm where they don't
21	even need to have been there because we're writing
22	such in such good detail and giving them so much

information that they can make a really solid 1 certification determination. 2 In doing that, 3 we're oftentimes only able to give really a very succinct snapshot that doesn't have the ability 4 5 to test this system. 6 There's not а whole lot of bi-directional 7 information beina looked There's not a lot of quick tools to just check, 8 does all of this add up? And so when we're looking 9 at our audits, and we're trying to see, is the 10 11 operation we're inspecting telling us the truth 12 that they really did get all of their corn, say, 13 from one operation. And we have no way to really go a step beyond that and say, does that operation 14 15 from whom they bought it even grow enough corn to meet the needs of that farm or stack up against 16 the receipts that that operation is providing us 17 18 at inspection? 19 So what acreage on certificates I think 20 would really do is just enable inspectors to be better data gatherers about potential red flags, 2.1 22 where we see a possibility of an issue of concern

where we could say, in either direction, anyone who's done business with this operation, we could see is there something of concern here? And that ability to crowd source more red flags, I think, is what we're seeing as the only real way that fraud gets busted.

The that onlv way we see real enforcement action is when we have more and more about potentially pieces of data fraudulent actions. Because several certifiers, three from whom we heard, are already doing this. And many of their farmers are telling us on last week's calls that it's not an -- a concern for them. fine putting their information on there. see it as a way to contribute to the greater transparency of the system.

I think that that's points for your proposal, Amy, or discussion document -- for this idea that we could have acres on certificates, by crop. Addressing those small holder concerns, like you said, Amy, that if you have a lot of mixed vegetables, or you have a very small amount of land

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1	that you're certifying, and needs to go down to,
2	say, square feet or what have you, the certifiers
3	who are already putting acres by crop on the
4	certificate, have already addressed the same
5	concerns.
6	So I think we have some fairly good
7	models with several years behind them that we can
8	look to. I just want to throw out that we
9	definitely heard everyone's concern that SOE is
10	nigh, hopefully, so let's not get the cart too in
11	front of the horse. But I think that this question
12	is really something that is such a very simple way
13	to increase transparency and increase the utility
14	of that inspection. Being able to look at
15	certificates and try to check if there's any
16	evidence of fraud in that inspection.
17	MS. BRUCH: Thanks, Nate. Brian, I
18	see your hand up.
19	MR. CALDWELL: Yeah. Thanks. This
20	is a really important issue, and I really am totally
21	in favor of the idea of including crop acreage,
22	or acreage by crop on the certificates. I think

it will be really easy to not have problems with 1 really small producers. I think mixed vegetables 2 3 is a totally fine category for maybe under, say, five acres, something like that. 4 And if anything is -- if any one crop 5 is maybe more than an acre, it could be specified 6 7 and I don't think that's a really difficult, you know, record keeping problem at all. 8 In fact, you 9 know, one of the big issues with certification is that it really helps you keep track of the records 10 you 11 need. And you know, pretty much that 12 everybody, feels that way, at least the small scale producers in particular. 13 So I'm totally in favor of that. 14 15 think that in terms of fraud, we really need to focus on targeting measures of detecting fraud on 16 17 the potential areas where fraud is likely to occur. 18 And so I'm thinking that any farm less -- with 19 less than \$100,000 of gross sales should not be 20 a prime target for any kind of special fraud detection, you know, record keeping or inspections 2.1

or whatever.

1	Because I really don't think that
2	they're the problem. And certainly if there is
3	some fraud in a smaller farm like that, it's not
4	going to distort the market. But we're talking
5	about fraud that really does distort the market
6	and can really hurt legitimate producers. So
7	anyways, those are my thoughts on it and I'd love
8	to hear what everybody else thinks.
9	MS. BRUCH: Thanks, Brian, for that
10	perspective. Kyla?
11	MS. SMITH: Yeah, thanks. I feel like
12	sometimes I when I talk about these things, I
13	feel a little bit, like, complainy or whiny because
14	ultimately, like, we will figure it out. But I
15	will say that, you know, what did Jenny say, what
16	there's 76 certifiers right now. There's
17	probably 76 different ways that certificates are
18	being issued, and that taxonomies are being used,
19	and the look of the certificate and all that. And
20	so I know that, like, maybe some of that's going
21	to get solved with SOB.

When the OID came out, you know, PCO

Τ	used to put mixed vegetables on the certificate.
2	And once that taxonomy came out, and because of
3	suppliers requesting more detail, like, they were,
4	like, mixed vegetables isn't cutting it anymore,
5	until we were having to produce, like, all these
6	extra letters, which was, like and it just
7	injured an additional administrative burden to
8	produce that. So we started putting that right
9	on our certificate.
10	And so for us to go back have to go
11	back to mixed vegetables for, like, to solve this
12	thing is just, I don't know, from it seems like
13	a bit of a step backwards. Or we would have to
14	have, like, one certificate in this one case,
15	because we have to pull data and specify things
16	in a certain way out of our database. But a
17	different certificate in this other case.
18	So, like, when I'm thinking about, you
19	know, acreage and how it's going to get recorded,
20	that's how my brain is working, is like how am I
21	actually going to do this with the data that's going
22	into the database. And how am I going to have to

1	re-specify the certificate and all these different
2	cases? And we haven't, as other certifier or
3	some certifiers had indicated that don't put that
4	on.
5	And we haven't either because we had
6	viewed it as confidential business information.
7	And so unless it wasn't, you know, mandatory,
8	I wouldn't feel comfortable without engaging with
9	our certified operations to gauge whether or not
10	they would want that on a public facing document.
11	So I think that's all I'm going to say right now.
12	MR. POWELL-PALM: So if I hear you
13	right, Kyla, if it was mandatory and all certifiers
14	were requested to do it, it would make an even
15	enough playing field that'd be worthy of the
16	investment?
17	MS. SMITH: Yeah.
18	MR. POWELL-PALM: Thank you.
19	MS. BRUCH: Thank you, Kyla. Let's go
20	to Javier next and then Logan.
21	MR. ZAMORA: Trying figure out a way
22	whether someone is buying and re-selling them

-- they're being dishonest about their operation. 1 It's not that difficult, but it's really touchy. 2 3 My certifier the last couple of years, they'd been asking about the mass content, how much we're 4 5 producing, on how many acres, to the point now where everything -- every time we plan something, we need 6 to get into their website and enter whatever we're 7 planting and how much acreage. 8 9 feels personal, but Ι think Ιt something needs to be done, because there are 10 11 certain things happening out there that actually 12 affect the smaller grower. But you know that two, 13 five acre grower that is very specialty crop, and they plant, you know, leafy greens three times on 14 15 the same area, four times during the year, radishes or cilantro whatever it is. 16 17 But there is -- there's ways, I mean, I think when you grow like this, it's because you 18 19 have a CSA, or you sell at a farmers market. So you have a constant usage of the land, and you're 20 planting constantly. 2.1 I mean, the CBC had 22 commissioners, the issue for someone to sell it

1	at the farmers market. It tells you per pound,
2	or linear feed, or boxes, all those things there.
3	And it tells you how many certificates
4	do you have to be able to sell the farmers market,
5	so there's ways to do things if you really want
6	to catch someone. But I think the problem here
7	is are you invading the grower's privacy. I think
8	it should probably be a little larger scale. In
9	our area, you're just starting to be large when
10	you have 30, 40, 50 acres.
11	Maybe in, you know, somewhere else in
12	the United States, 50 acres is probably your back
13	yard. But, you know, for me, I mean, I'm a little
14	over 100 acres. I'm actually a mid-sized grower
15	now. But small here is just like 10 or under.
16	So I think it has to be by size of acreage probably.
17	Something that really complicates things is how
18	diversified a specialty crop grower is. We have
19	some people that grow 50, 60 different things.
20	We have growers that we might just grow 20, 25.
21	So the tools are the out there. It's
22	just how deep and how personal do we need to get?

1	That's the question, without really feel like
2	you're invading people's privacy and farmers'
3	privacy. Again, if you're going to mandate
4	things, some of us might not like it, some more,
5	there's might be okay with it. But it just depends
6	how much more work you're going to create for the
7	producer, or whether the producer has the
8	personality to keep track of all these things.
9	But everything is there. I mean, we
L 0	report them to insurance, how many boxes of
L1	strawberries we've produced. We report to the
L2	insurance company. We report to the hired
L3	commissioners, we get the USDA census that we fill
L 4	every year, and all these things. So it just
L 5	depends which route we need to go.
L 6	MS. BRUCH: Yeah. Thank you, Javier.
L7	MR. POWELL-PALM: Yeah, one thing in
L 8	there.
L 9	MS. BRUCH: Yep, go ahead, Nate.
20	MR. POWELL-PALM: I really appreciate
21	that insight, Javier. I think that's something
22	that gives us some fuel to this discussion, is that

1	this is already existing data. How do we make the
2	data useful for catching fraud? So really this
3	is nothing on the producer. It would change
4	nothing for the producer. It would be work for
5	the certifier. And that's why I want to hear.
6	I see Kyla and I so value everything
7	she has to say about the subject because we're all
8	in this together. And we don't mean to put it's
9	not about trying to make more work. It's trying
10	to leverage data and reporting that we already do
11	to be more effective. So, sorry.
12	MS. BRUCH: Thank you, Nate, for saying
13	that. I was going to say something similar that,
14	that's for sure. I know we're running up against
15	our time commitment, at least for this section.
16	MS. PETREY: Yeah, Amy, don't worry
17	about it, Javier wrapped mine up with the USDA and
18	insurance requirements the farmers already have
19	to do. So he got into. So I'm covered. Thank
20	you.
21	MS. BRUCH: Okay. Thank you, Logan.
22	I really wanted to hear from you, Kim, and then

Brian again, and then we can make our game plan, 1 Nate, if we have additional time here. 2 So I'll echo that from 3 MS. HUSEMAN: the perspective of FSA acreage data. 4 And then I actually was looking into that as we were talking. 5 But the challenge is to define an umbrella 6 7 expectation that statement or encompasses everything from a linear feet to a section. 8 And it's very, very difficult to do. So I think that's 9 10 where I get hung up in this situation is where I 11 listened to you, Javier, as a farmer and how he's 12 designed his plan. And how I grew up farming, where you're 13 talking mile lines and sections and so forth. 14 15 then try to come up with a very similar statement that's going to encompass the plot that I grew for 16 farmers market. That is difficult. And this is 17 18 a challenge, and I -- this is a good challenge for

us to have. And -- but the other aspect to it is,

and I asked this during public comment, you are

going -- we are going to get multiple responses

as to where is that line between traceability and

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transparency and confidentiality. And, you know, I just want that to sit 2 3 with everybody in -- and, you know, determine what does that look like as well. So I don't know the 4 answer to these things, but these are things that 5 6 come across to my mind. But I guess it also goes 7 back in and I'll bring it back full circle to my initial question -- or a statement around, you 8 9 know, there's data within the USDA. Is that 10 plausible to utilize from a certifier standpoint, 11 and just lastly, to sit with everyone is, you know, 12 are all certified operations, or are all certifying bodies utilizing the same mechanisms, you know, 13 when looking in this arena. More statements than 14 15 questions. Thank you, Kim, I really 16 MS. BRUCH: appreciate your insight. Brian, we'll go with you 17 and then we'll wrap up this topic, okay? 18 19 MR. CALDWELL: Yeah. Yeah, really 20 Just, you know, I thought about, you know, auick. whether buyers need to know specifically whether 21 22 this one farm, you know, grows cilantro or not,

1	or something that I think Kyla was referring to.
2	And of course, you could say mixed vegetables
3	including, and then you list all your certified
4	crops. And you're getting an organic premium for
5	those crops, and it's it's not a big burden to
6	just list them out.
7	And again, the certifier should already
8	have that information on the field forms of what
9	crops are being grown, so I don't feel like it's,
10	you know, an extra burden. And in terms of
11	confidentiality for the small grower, I mean, I
12	grew 20 or for 20 years I grew five acres of
13	vegetables. And I really don't think there was
14	any confidential confidentiality issue with
15	letting anybody know what I was growing on those
16	five acres.
17	So I don't I guess, I don't get what
18	the problem is there, for a small-scale operation.
19	So those are my thoughts on that little aspect.
20	MS. BRUCH: Thank you, Brian. And
21	this is a really good topic. I appreciate all the
22	different viewpoints on this. I think some

highlights with this conversation was just, one, 1 to build on the harmonization of data, so this data 2 3 already exists. Can we streamline the data collection to make it relevant for our OSPs? 4 not create any extra work for farmers. 5 6 And then these diverse operations, 7 meaning the smaller ones that are having a lot of crops, you know, there are some best practices, 8 I think, in the queue that some certifiers that 9 10 are indicating crops on the certificates are doing. 11 So I think there's some learnings that can happen 12 there. And then, you know, in general through 13 oral comments and written, there was overwhelming 14 15 support really for this type of initiative, just because it's the basis to identify certain regions 16 just the volume of products that they're exporting 17 18 or producing, does it match acres? So we can look 19 at it on an individual field level, or we could 20 look at it over a large region area, too. So there's different applications for 2.1 22 just getting this simplified information. So this

is really great. I wish we could go on and on to 1 discuss this, but I appreciate everybody's time 2 3 todav. And probably, Nate, I'm just assuming we'll kind of table the discussion and work on the 4 second part in subcommittee, which is the universal 5 I think there was some good 6 bill of lading. information we received from stakeholder comments 7 on that to kind of start deliberating on in our 8 subcommittee. 9 Yeah. 10 MR. POWELL-PALM: I -- the only 11 thing I would throw onto that, is it sounds like 12 farmers -- especially farmers, but a lot of groups, are celebrating that organic is the most traceable 13 There's just some very obvious 14 system we have. 15 sort of black boxes in the supply chain that could be addressed. And I think continuity of lot code, 16 especially in durable goods like dry grain, is 17 18 something that's being flagged for us as a missing 19 piece, and something that was not consistently 20 being carried through. So we love -- and I think this is one 21 22 of the reasons I love organic so much -- is that

1	it is so traceable. But looking forward, how do
2	we improve that traceability? I think we heard
3	a lot of good things and can continue the discussion
4	about universal bills of lading, or the ideas about
5	how do you make this traceability even better.
6	MS. BRUCH: Thank you, Nate, and I will
7	turn it back over to you.
8	MR. POWELL-PALM: All right. Wow, we
9	are, like, 10 minutes ahead of schedule and feeling
10	fresh. So thanks everybody for bearing with us
11	today. This is great. As we look to tomorrow,
12	we're going to break here, probably top of the hour
13	is when we're scheduled, but we might even be a
14	little bit ahead of that. We're going to start
15	handling tomorrow, and we've got a good heavy lift
16	on that side.
17	And then after lunch, we're going to
18	be hearing from the Organic Seed Alliance, as well
19	as NIFA, with some updates there. Any closing
20	words, Michelle, before we head out for the day?
21	MS. ARSENAULT: I don't have any. I
22	think I we had some information on the slide

1	about tomorrow, but I think you already went over
2	that. So all right. Thank you, everyone.
3	DR. TUCKER: Wonderful day. Thank you
4	all. You guys did a beautiful job with some
5	complex discussions.
6	MR. POWELL-PALM: Yes. Thank you,
7	everyone. Thank you, Jenny. Really appreciate
8	everyone. All right. Until tomorrow. Take
9	care.
10	(Whereupon, the hearing in the
11	above-entitled matter was concluded at 4:51 p.m.)
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UNITED STATES DEPARTMENT OF AGRICULTURE

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NATIONAL ORGANIC STANDARDS BOARD

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SPRING 2022 MEETING

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WEDNESDAY APRIL 27, 2022

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The Board met via Videoconference at 12:00 p.m., Nate Powell-Palm, Chair, presiding.

PRESENT

NATE POWELL-PALM, Chair
MINDEE JEFFERY, Vice Chair
KYLA SMITH, Secretary
AMY BRUCH
BRIAN CALDWELL
JERRY D'AMORE
CAROLYN DIMITRI
ELIZABETH GRAZNAK
RICK GREENWOOD
KIM HUSEMAN
ALLISON JOHNSON
DILIP NANDWANI
LOGAN PETREY
WOOD TURNER
JAVIER ZAMORA

NOP STAFF PRESENT

MICHELLE ARSENAULT, Advisory Committee Specialist JARED CLARK, National List Manager

DAVID GLASGOW, National Organic Program Associate Deputy Administrator

ERIN HEALY, Standards Division Director

ANDREA HOLM, Materials Specialist

DEVON PATTILLO, Standards Acting Assistant Director

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

ALSO PRESENT

KIKI HUBBARD, Director of Advocacy & Communications, Organic Seed Alliance
MAT NGOUAJIO, National Science Liaison, Institute
of Food Production and Sustainability, NIFA, USDA

CONTENTS

1	P-R-O-C-E-E-D-I-N-G-S
2	(12:01 p.m.)
3	MR. POWELL-PALM: All right. I think
4	we're ready to kick it off. So we're going to start
5	with handling, but before that, I think it'll be
6	nice just to do a quick roll call hear from
7	everybody. And if you wouldn't mind and please
8	forgive me, I won't do this all the time, if we
9	could do a brief ice breaker where when you say
10	you're here, also just say something that surprised
11	or delighted you from yesterday's meeting. And
12	we can kind of get reactions for what we covered
13	yesterday because it was a lot, a lot of information
14	flowed. So apologies to the early people who don't
15	have a lot of time to think about this, but let's
16	dive in.
17	So getting us started, Amy, if you want
18	to go first.
19	MS. BRUCH: Sure. Thank you, Nate.
20	Hello, everybody. Amy Bruch here.
21	And to answer the ice breaker question. Let's see,
22	one, I guess, that time goes so quickly. That was

1	something that was nice to see there. Also, two,
2	I was just really overly impressed with the amount
3	of information the NOSB was able to receive from
4	the program. Jenny's comments and her thorough
5	review of just how the public comments and where
6	those fit in the priorities that the program had,
7	was really insightful. I'm glad that we were able
8	to spend as much time on that issue as we did.
9	So, thank you.
10	MR. POWELL-PALM: Absolutely. Thank
11	you for that.
12	Brian, please go ahead.
13	MR. CALDWELL: Yes. I'm here, and I'm
14	always astonished at how articulate everybody is.
15	And I try to make up for it by stumbling around
16	a little bit when I talk, but this group is really
17	quite amazing. So that was my shocker for the day.
18	MR. POWELL-PALM: I would echo that.
19	It's a great group.
20	Jerry, please go ahead.
21	MR. D'AMORE: Good morning. I thought
22	it was going to be tough being at the beginning

1	but it, you know, it's not, because everybody has
2	already said what you want to say. Anyway, good
3	morning, Jerry. I agree with you, Brian.
4	Listening to the whole group, the NOP as well, it
5	was smooth, it was informative, and it was fun.
6	So that wasn't a surprise. It was just what
7	happened. Thank you.
8	MR. POWELL-PALM: Carolyn, please go
9	ahead.
10	MS. DIMITRI: Hi. I also really hate
11	these ice breaker questions.
12	MR. POWELL-PALM: I know.
13	MS. DIMITRI: I don't know why. I feel
14	so much more comfortable when I, like, impose them
15	on people than when I have to answer them. But
16	I was delighted to see how people paid attention
17	for such a long period of time.
18	MR. POWELL-PALM: It is a haul. Yes.
19	Thank you for that.
20	Rick.
21	MR. GREENWOOD: Again, it's going to
22	be harder as we go along for the other people to

1	answer. But I also am always impressed at the
2	discussions that we have and how thoughtful the
3	comments are and how respectful all the board
4	members are to each other, and to the program.
5	And again, just a great example of this
6	public-private relationship. I mean, I think it's
7	wonderful.
8	MR. POWELL-PALM: Hear, hear.
9	MR. GREENWOOD: Yes.
LO	Liz. Oh, still on mute.
L1	MS. GRAZNAK: Okay? Got it.
12	MR. POWELL-PALM: Yes.
13	MS. GRAZNAK: Yes. Good. Good
L 4	morning. Yesterday was my first NOSB meeting.
L 5	So the whole thing was really fabulous. But also,
L 6	you know, very new for me. And I also have to say
L7	that I am so proud of my team because they ran the
L8	farm without me yesterday. So it was a really
L 9	it was a great day all around.
20	MR. POWELL-PALM: Fantastic.
21	Absolutely.
22	Kim, please go ahead.

1	MS. HUSEMAN: All right. So I am Kim,
2	and too must go, everything I although I agree
3	with my colleagues, I was delighted to see Liz
4	present her first Sunset yesterday. Handled it
5	marvelously. And looking forward to serving on
6	the the board with you Liz. So, well done on your
7	first Sunset.
8	MS. GRAZNAK: Thank you.
9	MR. POWELL-PALM: Hear, hear.
10	MS. HUSEMAN: Thank you.
11	MR. POWELL-PALM: Mindee, please go
12	ahead.
13	MS. JEFFERY: Good morning. I'm in
14	the love fest too. Thanks, everybody, for being
15	such a great team and being so fun to work with.
16	And that honestly, like, on all sides, I'm so
17	grateful to the program and all the work that goes
18	on in the background. And happy anniversary,
19	Michelle. Thank you so much for 10 years of
20	service and 20 years to the certifier. I mean,
21	just love fest of organic all day.
22	MR. POWELL-PALM: It was fun to see how

1	many of those 20 years certifiers there are, and
2	there still are. I mean, that's really, really
3	cool.
4	Bumping on. Allison, please go ahead.
5	MS. JOHNSON: Morning. I was
6	delighted to hear Sean Babington recognize the long
7	list of things that Organic does best. He talked
8	about, water quality, erosion, cover cropping,
9	crop rotation, soil health. It's so good to hear
10	people higher up within USDA recognizing what we
11	all know and looking for ways to understand it
12	better.
13	MR. POWELL-PALM: Absolutely.
14	Absolutely.
15	Dilip, please go ahead.
16	MR. NANDWANI: Good morning. I was
17	delighted to hear of our guest speakers, as Allison
18	just mentioned, from NRCS as well as from
19	climate-smart agriculture. Those two were
20	fantastic. Very, very good to hear and a lot of
21	good updates because as a university faculty I'm
22	writing some grants and that will be very helpful.

1	And also I this is my first NOSB meeting. That
2	was first day and it went very well. And I was
3	really amazed to see how coordinated efforts of
4	everyone is playing, whether it is from NOP staff,
5	or from administrators, or from board members, and
6	as well as from the listeners who passed wonderful
7	comments. And I was really, really amazed to see
8	this coordinated effort. Thank you.
9	MR. POWELL-PALM: Thank you.
10	Logan, please go ahead.
11	Apologize?
12	MS. SMITH: Logan was going to be
13	delayed this morning.
14	MR. POWELL-PALM: That's right. Yes.
15	MS. JEFFERY: Yes.
16	MR. POWELL-PALM: She told us that.
17	Yes.
18	Kyla, please go ahead.
19	MS. SMITH: Hi, everybody. Well, I
20	wholeheartedly agree with what everybody has
21	already said. So I'll pick something new, and I
22	have two. So first thing, I was delighted by

1	Nate's run of show, first meeting as the chair.
2	I think it went off swimmingly. So all the way
3	just from keeping us sort of on time, thanks to
4	Kim, and as well as your eloquent response to
5	Mr. Babington. And also I was so delighted and
6	impressed by the new members' participation in
7	their first meeting. So, thanks.
8	MR. POWELL-PALM: Absolutely. Thank
9	you, Kyla.
10	Next up, we have Wood.
11	MR. TURNER: Well, doggone, I was going
12	to say to Javier, Javier, when you live down here
13	in the outback where you and I live, and where Kyla
14	lives you you know, you never get a chance to
15	say anything new. So we have to lean on the chair
16	to sort of reverse the order sometimes. So and
17	
18	MR. POWELL-PALM: Cheers.
19	MR. TURNER: and just at the last
20	second Kyla robbed me blind of my ability mu
21	opportunity to say how much I appreciated Allison,
22	and Liz, and Dilip, and Javier leaning into this

1	process yesterday and really kind of finding their
2	voices on this board. So, that was what excited
3	me the most. So
4	MR. POWELL-PALM: Absolutely.
5	MR. TURNER: try that one on,
6	Javier, and see what you can do.
7	MR. POWELL-PALM: All right, Javier,
8	go right ahead.
9	MR. ZAMORA: Thanks. Yes. I well,
10	thank you. I guess you guys almost said it all
11	and it gets for a beginner, it's gets really
12	difficult. But I just wanted to say that I first
13	of all, I'm really happy that I was able to stay
14	in one room for, like, five hours, which is very
15	unusual for me. My anxiety was started to kick
16	in towards the end. I had to go out.
17	MR. POWELL-PALM: I feel you.
18	MR. ZAMORA: But I'm just really
19	impressed on the wealth of knowledge that we all
20	have from different environments and it's this
21	is a very unique board. It is really demanding,

but it's great to see all your experiences and

expertise coming on one platform and I think I'm going to learn a lot of from you. So yes, I am here, and [inaudible].

MR. POWELL-PALM: Thank you so much, I'll throw mine now, napalm bomb. I was delighted by a couple of things. But I think the thing that struck me most was our discussion around climate change and how we are actively pursuing this dialogue to make sure that Organic is recognized for what a solution it is, and how we have a really great infrastructure to provide a market oriented solution to climate change for farmers, as well as businesses looking to invest I would call social solutions to climate I'm really excited for change. So further conversations that we might be able to have with USDA.

And just can't thank Jenny enough for those updates. I feel like our entire community was lit up yesterday with excitement about how we are making progress. And so thank you, Jenny, for taking so much time to prepare so much information

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1	for us. Really appreciate that.
2	All right, team, now that we're all
3	warmed up, shall we jump right into handling? Are
4	you ready, Kyla?
5	MS. SMITH: I am ready
6	MR. POWELL-PALM: All right. Take it
7	away. Thank you.
8	MS. SMITH: to go, Mr. Chairman.
9	We're going to reverse the order a
10	little bit in handling. So apologies for that.
11	But we're had some members that had some tech
12	issues, and so we're sort of switching it up. So
13	we're going to start with the 2024 Sunset, and
14	attapulgite and diatomaceous earth are being moved
15	to the bottom of the Sunset list. And then we'll
16	circle back around into the proposal for CPC and
17	then the proposal for phosphoric acid annotation
18	change. So with that, we're going to be starting
19	with bentonite, and Wood is the lead.
20	MR. TURNER: Thanks, Kyla.
21	So we have a substance bentonite which
22	is 605(a) nonsynthetics allowed listing. It's a

1	historically it's been a pretty straightforward
2	material. We haven't done a technical report on
3	it since a TAP was done in 1995. So it's been
4	fairly straightforward and I think that's largely
5	been because our comments have been pretty straight
6	pretty, you know, pretty limited over the years.
7	It's a processing aid, not an
8	ingredient. It has absorptive qualities to make
9	it useful for taking out impurities in oils,
L 0	clarifying beer, fruit juice, and the like. Not
L1	something that is present in the final product.
12	It's some of you are probably familiar with
13	it in a variety of applications. You know, it's
L 4	a clay material that, you know, takes on a
L5	distinctive clayey smell in the presence of liquid
L 6	is but it is insoluble in water and liquid.
L7	The listings. There's a sort of a mix
L8	of listings internationally for allowing the
L 9	material. I think in some cases it's just simply
20	not noticed or not recognized as something of
21	concern, generally regarded as safe. There were
22	some comments from the community. And I would say

1	largely there was no opposition really to the
2	relisting of the material. I think the biggest
3	issue I think we want to think about over the next
4	several months in preparation for the fall, is sort
5	of whether the material should be clarified in the
6	annotation because of some discussion about, sort
7	of, acid treated versions of the material versus
8	non-acid treated versions of the material.
9	And I'm still trying to get up to speed
10	on, sort of, what that really indicates or what
11	we need to learn about that. But I that most
12	of the conversation is typically from some sort
13	of buyers have asked for that have asked for
14	some clarification on that point as we think about
15	relisting the material. I think that's all I want
16	to say at the moment. Are there any questions?
17	MS. SMITH: Okay. Are there any
18	questions for Wood?
19	And then we will move to magnesium
20	chloride, which is me.
21	Okay. So magnesium chloride is listed
22	at 205.605 nonagricultural, nonorganic

ingredient substances, not as in or processed products labeled as organic or made as organic. And there is no annotation. So magnesium chloride is used as -- mostly as coagulant or firming agent in tofu production, and is also used in dietary supplements, and can also be used as a color retention agent.

We did ask two questions related to this material on whether or not the use of magnesium chloride as a color enhancement is consistent with organic principles; as well as other materials that appear on the National List with similar -- or same functions and just how they're comparing, and if they offer alternatives there -- or if these alternatives offer the same or similar function.

We did get several comments and most were in favor of relisting. However, there were several commenters that suggested annotating to limit the use. So if we are finding that because this is, you know, mostly used in tofu production, you know, and in dietary supplements, to specify that in the annotation. And mostly, that was the

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recommendation, was to limit the use for those two 1 And so I might infer that with those 2 reasons. 3 comments, perhaps there is an indication that stakeholders believe that the use as a color 4 5 enhancement is not consistent with 6 principles, although no commenters explicitly 7 stated that in their comments. And no one really addressed the second 8 question in regards to other substances, you know, 9 10 offering similar functionality same or 11 essentiality. So overall in favor, perhaps look 12 at the annotations. And I would still be curious 13 to hear more direct answers to these questions in So they'll probably, you know, stay and 14 the fall. people have -- could provide answers. It's always 15 helpful to have more information. Any questions? 16 I don't see any. 17 18 Nitrogen is next. That's also me. 19 So nitrogen. We're still at 205.605, 20 and (a) nonsynthetics allowed, nitrogen, oil-free grades. This material is used as a -- to reduce 2.1

oxidation of product during processing, storage,

1	and packaging. It's also used in flash freezing.
2	And all commenters were in favor of relisting.
3	This is a pretty slam dunk one. Any questions?
4	Yes, Brian.
5	MR. CALDWELL: Hi Kyla. I'm just
6	wondering, it says, nitrogen-oil free grades. And
7	I think of nitrogen as a gas. I'm just wondering
8	how there could be oil in some grades?
9	MS. SMITH: That's a good question that
LO	I'm probably not going to be able to answer
L1	specifically here without looking back in the TR.
L2	But, Rick, do you know?
L3	MR. GREENWOOD: Yes. I think I can
L 4	answer that.
L5	MS. SMITH: Okay.
L 6	MR. GREENWOOD: Depends on the
L7	production method because sometimes the
L8	compression, how they compress it to turn it into
L 9	a gas, can get oil into it. It's very similar if
20	you're a scuba diver and you need air. You need
21	to make sure that the compressors don't leak oil.
22	So there's it's cheaper but oil free grades

1	are obviously better for food. And if your
2	breathing, its also a good thing. So it's really
3	how it's made.
4	MS. SMITH: Okay. Any other
5	questions. Okay.
6	Next up is Dilip with sodium carbonate.
7	Dilip's first Sunset.
8	MR. NANDWANI: Thanks, Kyla.
9	Good morning again. So the sodium
10	carbonate, it's listed as a nonsynthetics allowed,
11	205.605. And past NOSB actions, 2015 technical
12	report, and as well as 2017 Sunset recommendations
13	available. So subcommittee reviewed but the
14	first, it's use. And sodium carbonate, which is
15	also referred as washing soda or soda ash, and used
16	as a raising agent. And it can also be used as
17	an anti-caking agent sorry, caking agent,
18	acidity regulator, a stabilizer, or as a
19	neutralizer in food industry.
20	It's manufactured and produced in North
21	America from naturally deposits of trona ore and
22	in California, sodium carbonate can be produced

natural brine. subcommittee from using So forwarded four questions to stakeholders. First question, is this material still essential for organic handling and processing? Second, there alternative materials that can Third, what are the relative sodium carbonate? environmental impacts of trona mining or brine extraction during production of sodium carbonate? And the fourth, is sodium carbonate produced from trona or brine extraction nonsynthetic? So we got a lot of comments and -- from the stakeholders, and which are supportive to continue relisting of sodium carbonate.

I found one comment interesting, which
I will mention at the last, but before that, I would
like to say a few comments. One certifier
mentioned, quote, There are no viable organic
alternatives and the material is compatible with
organic principles. End quote. Second
stakeholder provided, Numbers of certified organic
operations use sodium carbonate. Another one
mentioned that, Our options for cleaning of our

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manufacturing facility are limited and thus the removal of any materials allowed for cleaning can 2 3 be problematic. Also a commenter mentioned that, We are not aware of an adequate substitute for this 4 cleaning agent. If sodium carbonate were to be 5 6 delisted. End quote. One comment, which is from 7 a non-profit organization, which remains neutral on sodium carbonate and does not take a position 8 on whether individual substances should be added 9 or removed from the National List. 10 11 So t.he comment which is one 12 interesting, I'm going to say that. The commenter or stakeholder mentioned that sodium carbonate is 1.3 a caustic and corrosive material and questioned 14 the listing of sodium carbonate on 205.605(a) 15 without an annotation. Sodium carbonate may be 16 produced from mine deposits bv 17 or chemical reaction, and that is a solvay process, they call 18 So if the NOSB intends 19 it, which is synthetic. to allow only the nonsynthetic version, it should 20 annotate the listing produced from mine deposits. 2.1 If the NOSB intends to allow synthetic sodium 22

1	carbonate, then it should also be listed on
2	205.605(b) with the annotation, Produced using
3	solvay process.
4	The handling subcommittee has not
5	received a technical review that examines
6	alternatives. The handling subcommittee should
7	propose an annotation, clarifying the
8	classification of sodium carbonate. It should
9	request that the audit examines alternatives. And
L 0	again, lastly, public commenters supported the
L1	continued listing of this material. Thank you.
12	Any questions?
13	MS. SMITH: Great job, Dilip.
L 4	MR. POWELL-PALM: Just want to throw
L5	out a great job, Dilip.
L 6	MR. NANDWANI: Thank you.
L7	MS. SMITH: Go ahead, Brian.
L8	MR. CALDWELL: Thanks, Dilip. Just
L 9	wondering. Is sodium carbonate used essentially
20	for the same purposes as sodium bicarbonate, which
21	is baking soda?
22	MR. NANDWANI: There was one comment,

1	I think, I read that about sodium carbonate, but
2	it says sodium bicarbonate. But I don't remember
3	because that stakeholder put together several of
4	the materials into one re-listing. So at this
5	point, I don't have a clear answer to your question.
6	But several of the stakeholders, they have
7	reviewed, actually, several handling materials and
8	they were kind of going through with that
9	re-listing, including the sodium carbonate where
LO	it says bicarbonate. I can get back to you once
L1	I review my TR back, and I can get back to you.
L2	MR. CALDWELL: Great, thanks. It
L3	sound it seems to me just off the cuff that it's
L 4	probably just sort of a little bit of a stronger
L 5	reactant than bicarbonate, but I could be wrong.
L 6	Yes.
L7	MR. NANDWANI: I don't know Rick has
L 8	any idea, or maybe Wood, because he's also part
L 9	of subcommittee and they may have reviewed this
20	material before. Any comments from Wood or Rick?
21	MR. GREENWOOD: I'm not that familiar
22	with those, so I have no comment

1	MR. TURNER: NOT Me.
2	MR. CALDWELL: Thanks. I'm good.
3	MS. SMITH: Okay. Next up is Carolyn,
4	with acidified sodium chloride.
5	MS. DIMITRI: Okay. Acidified sodium
6	chloride is a processing aid made from natural
7	citric acid and it's has a secondary direct
8	antimicrobial food treatment use, and an indirect
9	food contact surface sanitizer. So basically,
10	this is not very widely used. There were a few
11	no objections really to relisting. And then
12	one commenter suggested that this is something that
13	we could look at in our review of sanitizers if
14	that is actually something we're doing. I know
15	there's been talks a lot of talk about
16	sanitizers, and I don't really know where all of
17	that stands, but this should maybe fit into that
18	category. So that is basically what I have to
19	report. Any questions? Please don't make a thing
20	about review of sanitizers, though.
21	MS. SMITH: Okay. I see none.
22	Carolyn, you also have carbon dioxide.

Another interesting 1 MS. DIMITRI: It has several uses, carbonation of 2 product. 3 beverages, it's used in modified atmospheric packaging and storage, and also used for pest 4 control in storage for green and produce. 5 6 overall, there was a lot of support for relisting 7 this product, and no one suggested that we should not relist it. Any questions? 8 9 Mindee. 10 MS. JEFFERY: Thanks. A question in 11 general for the group. I'm trying to wrap my head 12 around carbon dioxide in total for organic systems. So in handling relist it as a synthetics allowed, 13 does that mean by implication natural is allowed 14 15 also, natural versions of Co2 in organic systems 16 in general? Or is that kind of outside the scope? 17 MS. SMITH: My understanding of the 18 handling list is that it does not function the same 19 way as the crops and livestock list, where 20 nonsynthetics inherently allowed. are My understanding of the 605 is that it needs to be 2.1 22 listed in both places.

1	MS. JEFFERY: Okay. Thanks. I get
2	confused on the crops and handling sometimes. I
3	really appreciate your help.
4	MS. SMITH: Yes. I mean, Jared,
5	correct me if I'm wrong, but that's always been
6	my understanding.
7	Thumbs up from Mr. Clark.
8	Any other questions for Carolyn?
9	MS. DIMITRI: Everyone likes their
10	carbonated beverages.
11	MS. SMITH: Yes.
12	Okay. Wood, you are next with sodium
13	phosphates.
14	MR. TURNER: So we have a listing for
15	sodium phosphate the 205.605(b) it's in allowed
16	synthetics for use only in dairy foods. Sodium
17	phosphates are salts used as pH control agents and
18	buffers in organic dairy products. They stabilize
19	milk, can emulsify cheese, and several other
20	functions that are relevant to dairy production.
21	They've been they're in that class of materials
22	that have generally been regarded as safe.

But, you know, they -- the comments over 1 the years on sodium phosphates has been notably 2 3 mixed, mostly along the line -- let's say in the context of concern about human health impacts and, 4 I guess, it's what I would consider to be a debate 5 on essentiality. You know, one of the issues on 6 the health side is that there are other phosphates 7 on the list. And so the implication that any one 8 phosphate is particularly -- should be implicated 9 in any human health considerations is hard to 10 11 support in the science. But there is a -- there's 12 always -- historically there's been a, sort of, a continued attention to this particular issue. 13 14 It's also, as a phosphate, you know, 15 has some inherent eutrophication sort of water -pollution to water body concerns. Phosphates are 16 historically, you know, part of the scene in 17 18 preparing detergents so -- I think we're all 19 familiar with that. So, you know, and I -- and then I'll also just point out that there's a --20 there is a -- in the process of making or producing 2.1 22 sodium phosphates, phosphate rock is mixed with

1	sulfuric acid to form phosphoric acid. And given
2	the fact that we have another conversation today,
3	a proposal on phosphoric acid, you know, there are
4	some implications for that proposal, Kyla, on this
5	particular material, and some concern in the
6	community about phosphoric acid as an ancillary
7	substance that is involved in the production of
8	sodium phosphates. So I think that's what I'll
9	say, for the time being.
10	MS. SMITH: Thanks, Wood.
11	Any questions for Wood? I'm not seeing
12	any.
13	We will go to Allison with her first
14	Sunset presentation of potassium acid tartrate.
15	MS. JOHNSON: All right. Not casings.
16	MS. JEFFERY: Hold on. Yes. Are we
17	casings or which one are we doing? We have
18	casings on the slide.
19	MS. SMITH: Okay. Sorry. The order
20	on my paper is
21	MS. JEFFERY: It's so good.
22	MS SMITH. Co ahead Mindee

Okay. Thank you. MS. JEFFERY: 1 Sorry. 2 I wanted to express my gratitude for 3 the cadence of the way we do Sunsets because I don't live in this work every day in my regular life as 4 5 retailer. So Ι really appreciate 6 clarifications and the timing that we get to really dive into these substances and make sure we get 7 all the perspectives landing in my understanding. 8 9 So I just wanted to say that. And I love the spring meeting and our process of discovery. 10 11 So for casings, listed at 606, casings 12 produced from intestines -- 606(b). And I had a couple of questions for certify -- for the 13 14 stakeholders there and got some really great 15 Commenters in general are supportive of answers. relisting for the few area -- a few areas for 16 group noted that 17 discovery. One nonorganic 18 casings rely on chemically intensive livestock 19 production, which in turn relies on chemically 20 intensive corn and soya production, and asked the NOSB via the TR process, to identify the barriers 2.1 22 to organic casing production.

Another group requested that we think about having a work agenda item and a discussion document on the -- on those barriers, with the rationale that if organic meat is slaughtered, then organic casings theoretically exist and should be required. And I'm super grateful for the lengthy answer to that question submitted in public comments by a producer, outlining the barriers to organic production of casings.

The more predominant casings in organic processing, according to this stakeholder, derived from hog intestines. And since the organic hog industry is growing and it's tempting to assume that organic casings are available, that may be true at some point, but issues of scale are still at play. Organic hog production is roughly 0.058 percent of the US totals. Intestines are not uniform within one animal, among herds, and throughout the population. In processing intestines are selected, sized, and assessed for quality.

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1	Farmer raised hogs for this producer
2	has produced variable intestine sizes, making
3	these casings unfeasible to use. They noted that
4	small plants that slaughter less than several
5	hundred hogs per day do not have the infrastructure
6	to save, clean, sort, and select intestines.
7	Instead, intestines go in the inedible barrel as
8	offal. If separate if segregation were
9	possible, it would take two to three weeks of
LO	organic production to accumulate just one barrel
L1	of intestines from organic hogs. And if it becomes
L2	possible to segregate, those intestines then
L3	wouldn't have an outlet for final organic casing
L 4	production.
L 5	So, really appreciated the depth of
L 6	that comment by a producer who really understands
L 7	the dynamics. A certifier reflected that most
L 8	organic sausage makers use cellulose as an
L 9	alternative, but this doesn't meet consumer
20	expectations. So a lot of really great
21	information there from the comments. Is there a
22	auestion?

1	MS. SMITH: Nate, I saw your hand
2	raised?
3	MR. POWELL-PALM: Yes. I had it
4	came and went. But the question I would have
5	I echo your appreciation and defer the comments
6	that we did get. I think for the folks asking
7	trying to put two and two together where they're
8	saying, there's more hogs being slaughtered, why
9	don't we have a casings industry? That's
10	something I would really like to hear more about
11	in the fall meeting and put on the community to
12	do a little bit of that business research, talking
13	to known suppliers of organic casings and or
14	casing production, and see what the barriers are?
15	How, as a community, we can figure out how to
16	overcome those barriers. I think I might
17	challenge the growth of the hog industry
18	assumption. It is still pretty small and it is
19	not growing like the other species sectors. So
20	I would just think that our community could come
21	up with some really good business insights for how
22	we might be able to do that.

1	MS. SMITH: Thank you.
2	Amy.
3	MS. BRUCH: Yes. I agree with Nate,
4	and just to try to have a little bit more a window
5	into this world, I would be curious, you know, right
6	now, what would be the ratio of using organic casing
7	versus not, and see that percentage. If we can
8	ask the community, you know, where it stands
9	currently and then that was insightful by that
10	producer to understand some of the barriers. I
11	think, you know, those comments, I think they also
12	wanting to attach them to this 205.606 category
13	is really a huge opportunity to just leverage the
14	\$62 billion industry that our organic marketplace
15	is, and start making opportunities for additional
16	organic growth in some of these areas.
17	MS. JEFFERY: Yes. Just I
18	definitely I really like your comment, Amy.
19	And living on this farm right now I'm having this
20	opportunity to watch the difficulty that a small
21	producer faces in gaining access to processing
22	facilities and then being able to do that

1	organically, is a barrier that I think we see as
2	a country. And I hope that Organic can become part
3	of the solution for the small producers in that
4	area as well.
5	MS. BRUCH: Yes. Absolutely. One
6	thing to add before I know there's other people
7	that have their hands up, is these barriers.
8	Actually some of them can be accomplished, I think,
9	through this grant process that we heard about
10	yesterday. You know, a climate-smart
11	agriculture, the emphasis on processing systems,
12	the emphasis on just more stakeholders being able
13	to produce more things on their farm. So, you
14	know, there's the conservation innovation grant.
15	And also, you know, the climate-smart agriculture
16	grants that we heard about yesterday. I think
17	there's a point to processing and packaging
18	equipment that I think producers should try to
19	leverage a bit more of.
20	MS. SMITH: Thank you, Mindee.
21	Okay. Kim?
22	MS. HUSEMAN: Thank you, Kyla.

1	Maybe this is segueing into Amy's last
2	comment, is the difference between live production
3	and processing. And I think where I'd be
4	interested to get more feedback is from the
5	manufacturing process and the barriers inside of
6	the facilities around segregating and maintaining
7	organic status once the harvesting process begins.
8	And how, you know, what barriers and challenges
9	there from that perspective. Then, you know,
10	couple that with fragmented space, and what
11	suggestions would be to try to overcome that
12	fragmented space.
13	So all good things, though. And we see
14	this in other aspects, not just casings, but this
15	can segue into multiple facets in the animal
16	production and green production aspect, as when
17	you take a whole part and then divide it into its
18	sub-parts. And how can we have organic stability
19	in multiple arenas. But, yes, this is definitely
20	one of them.
21	MS. SMITH: Carolyn.
22	MS. DIMITRI: This is just some general

1	information that I think might help when we think
2	about casings as we go ahead. And so if you look
3	at the 2019 census of organic farms, there were
4	only 166 that were producing hogs. And in some
5	research that I've been doing over the past year,
6	you see there's a lot of pressure on organic
7	livestock producers in terms of they don't have
8	enough processing capacity and they don't have
9	enough feed capacity. So, I don't know. I mean,
10	it might be useful for us to think about, like,
11	at what point would the hog market be developed
12	enough where actually there could be a supply of
13	casings that could be used as an input into the,
14	you know, the next level of the supply chain.
15	MS. BRUCH: So I can only maybe think
16	of one additional thing and this is a little bit
17	of a carryover from yesterday. Carolyn was
18	referencing census information and this could
19	potentially be helpful, you know, when we were
20	talking about
21	MR. POWELL-PALM: Amy, we're losing
22	your sound a little.

1	MS. BRUCH: Sorry. Can you hear me.
2	I'll
3	MR. POWELL-PALM: Yes. Much better.
4	MS. BRUCH: try to talk a little
5	louder. Okay. Yes. I don't know where I left
6 0	off, but I was just mentioning that Carolyn brought
7 i	up the comment about looking at information via
8 0	census data and I know that that's not a
9 á	all-encompassing status on what the market really
10 ł	has. So again, I'm just going to point out our
11 -	the CACS comment about acres on certificates
12 á	and that there were the community feedback about
13 (getting livestock information on certificates.
14 \$	So that would be a real good way to mass balance
15 t	the current status of the industry with clarity.
16	And having that information can be helpful to
17 s	solve maybe some of these 205.606 type questions
18 t	that we have. So, thank you.
19	MS. JEFFERY: That's the great
20 (comment. Thank everyone for all the input
21	MS. SMITH: Okay. I'm not seeing any
22 m	more hands

So, Mindee, I'm going to get the order 1 right now, we're going to go to pectin, which is 2 3 also Mindee. MS. JEFFERY: Thanks. Sorry. 4 Just switching my notes here real quick. 5 Technology 6 fail. Sorry. 7 So pectin, here we are 205.606, and you'll notice we're at (o) now. We had a recent 8 9 rule-making that changed the listening to (o). And major question here is, what is happening with 10 11 developments in the organic source of pectin? 12 Public comments definitely support the relisting of this very ubiquitous and widely used substance 13 Routinely used as a stabilizer, 14 in many areas. 15 a thickener, and a gelling agent, and that organic alternatives are not available or don't meet --16 17 function at the same quality. 18 A commenter emphasized that pectin is 19 essential to low sugar jams and there are no 20 alternatives at this time. And that consumers with specialty diets rely heavily on certified 21

jams.

organic

low

sugar

22

producer

Pectin

associations commented that supplies of organically produced fruit and citrus peels are simply not sufficient to produce enough pectin from organic sources. Most of the time, we heard from an oral commenter, that it seems like most of the organic fruits that could be used to make pectin are sold as whole fresh fruit.

And again, you know, we saw a lot of different commenters noting that the supplies of organic fruit peels are insufficient. They're listed as essential by a number of different organizations and comments. One group suggested that low methoxyl pectin is a result of a synthetic process and the National List should be limited to the high methoxyl pectin as it is extracted from citrus and apple. A group suggested that all 606 listings should be seriously considered for removal.

An oral commenter -- oh, I already got that one, sorry. And then we saw that slide from the oral comment that was on -- reflected the functionality of pectin versus alternatives in the

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categories the 1 of gel texture, protein stabilization at low pH, mouth feel in beverage, 2 and acid stability. 3 Pectin, according to the commenter, was the only organic alternative that 4 could meet all four expectations. Yes. That sums 5 6 me up. Are there any questions? 7 Go ahead, Amy, and then I MS. SMITH: 8 have one. 9 MS. BRUCH: Okay. It sounds good. 10 Thank you, Mindee. Again, this is a 11 205.606 and just another point on being able to 12 solve some of these barriers to additional organic use would probably be looking at, you know, the 13 benefit from a farmer point of view. 14 Also farmers 15 you mentioned, you know, are selling their fruits mainly to the whole fruit market. There are, you 16 17 know, irregularities in products that go to juice. 18 And to have -- for a farmer to have a dual income 19 stream, both for their main product and also a 20 byproduct would be really helpful and create the synergistic effect really to grow farmers' farms. 2.1 22 So I really think a 205.606 identifying the

barriers, like you mentioned in the past, but 1 2 looking at the relevancy to our current 3 marketplace, I think would lead to a opportunities that aren't being tapped into for 4 professional organic producers. 5 I had a similar comment. 6 MS. SMITH: 7 Just about -- as you said, Mindee that, you know, so much of the product going to the whole fruit 8 But yes, what about all the peels that 9 10 are coming off of oranges that are for juice, or 11 apples for juice, or apple sauce, or whatever. 12 So where did those end up and can -- if -- can those be utilized into making organic pectin. 13 Javier. 14 15 Yes. I was just going to MR. ZAMORA: I think there's say I echo what you just said. 16 a big opportunity there for some producers. 17 18 you're going to sell your apples as fresh and --19 and maybe for juicing and stuff, but there's other 20 crops that could be used. I can only think of two right away. And number one is quince. Second, 21

there could be some wild apples that could be used.

And the third one, maybe the guavas are really, really high pectin crops. I'm just thinking on my childhood and how in Mexico quince candies are created in a very easy way. And they can make it really easy, as well as the guava, you know, kind of a candy type of thing that are very predominant in the Mexican culture. So maybe there's a good opportunity there for some producers that can, you know, use some of those things.

10 MS. SMITH: Thanks, Javier.

11 Brian.

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MR. CALDWELL: Yes. In our area, there's an increasing amount of organic apples being used for hard cider. And so the pomice, which is the -- after the squeeze -- after the juice is squeezed out, the pomice is what's left over, and it seems like that could be, you know, a source of pectin. Often now, it is just applied to the field where it has really beneficial effects. But I think that there's -- if -- a problem would be that if pectin is allowed under 205.606 that's not organic, there would never be a sort of an organic

price premium that would allow an organic pectin 1 market to develop, or a organic pectin production 2 3 facility, or something to develop. So I think that might be one of our barriers as well. 4 how to address that. 5 6 MS. JEFFERY: Yes. Thank you, Brian. That's a -- it's a good point. I think I missed 7 the opportunity to also say that I appreciated one 8 certifier listed that they had 49 nonorganic pectin 9 uses and 4 organic pectin uses. So I think there 10 11 is a little bit of development that I really hear How do we move the needle on this one? 12 vou on. 13 MS. SMITH: Rick. Just a comment 14 MR. GREENWOOD: Yes. 15 for some of the new board members. I've been on the board long enough to know that we continually 16 struggle with -- and I guess, I'll call it the 17 18 chicken and egg thing, trying to get new markets, 19 but at the same time not destroying the existing 20 And so how do you get incentive if you keep the nonorganic products on the listings, 2.1 22 develop the new market. So I don't think -- at

least in my mind, I have never figured out how we 1 It's almost like we need a parallel 2 can do that. 3 process. The other comment I'd make is, from 4 reading some of the things from the pectin people, 5 6 all pectins are not the same. And they seem to have -- they like citrus pectin more than apple 7 pectin and others. So I think it also would take 8 9 reformulating their products. So it's really -it's a difficult problem that we've dealt with on 10 11 so many other levels. But -- so I don't have an 12 answer, but I thought I'd at least mention the 13 problem. 14 MS. SMITH: Yes. Thanks for that, 15 I will say that there have been examples. So, hops being one that I'm thinking about that 16 17 was on 606. And there was then enough of an 18 organic, like, hops market, and then whoever, you 19 know -- I don't remember all the ins and outs, but 20 had sort of worked to corner that, and really develop that market petitioned for the removal on 2.1

So I do think that there is a process and

606.

1	a path forward for that if, you know, someone out
2	there really gets a stronghold in the organic
3	pectin market, they can petition for the removal.
4	So, anyway, that's the current process as I know
5	it. Any other questions or comments on pectin?
6	MR. POWELL-PALM: I just always think
7	of 606 as the land of business opportunities.
8	MS. SMITH: I know, right?
9	MR. POWELL-PALM: A little more
L 0	surprised that people aren't just constantly
L1	jumping on these. It seems like the framework is
L2	here to help the business along.
L3	MS. SMITH: Okay.
L 4	Okay. Now, back to potassium tartrate
L5	with Allison.
L 6	MS. JOHNSON: Thank you.
L7	All right. Potassium acid tartrate is
L 8	a 606(p). Most of us know this material as cream
L 9	of tartar. It occurs naturally in grapes and it's
20	a byproduct of wine making. It has a few main uses.
21	It's used in baked goods, as an ingredient in
22	baking powder, and for stabilizing egg whites, It's

also used for pH control, including for adjusting acidity of wine and as a antimicrobial.

And it's basically an extract of the crusty sediment that sticks to the sides of wine barrels and wine vats and it's extracted with hot water from wine lees, which is the dead yeast and grape sediments. It doesn't involve any reagents or solvents, just hot water. This material was changed from being listed as a nonagricultural synthetic to agricultural in 2019 after the last round of Sunset review and the NOSB recommendation. So it does have that commercial availability requirement attached to it now.

We received a handful of comments. Several certifiers noted that they have clients who use it, including as a pH adjuster in wine making, and in baked goods. Several comments seemed neutral, the other had no clients using it or no member comments, and many noted that there are no listed products. And there was only one comment in support of removal. They argued that this material is a product of chemical intensive

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agriculture, which is always a really important reminder for us, I think, when we're looking at all of these 606 listings. And they advocated for Sunsetting it to ensure that organic is required, and also noted that there are substitutes for baking, although the link that they provided in solution said that it's actually pretty hard to substitute for.

The stakeholder question presented is about whether there is enough supply to meet commercial needs. And we didn't get any comments commercial availability, although several on commenters noted that they'd be interested in the No certifiers said anything about how they oversee the commercial availability searches for operations that are using the nonorganic form. So it'd be really helpful before the fall to hear from anyone who produces, uses, or certifies organic potassium acid tartrate. It's hard to tell if there's actually any on the market from what we've received so far.

I will note that from -- putting my,

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1	well, certifier hat back on, I think commercial
2	availability for this material is particularly
3	hard because it's derived from wine, and that
4	because of the input limitations for organic wine,
5	there are very few wines that are actually
6	certified organic. Most have the made with
7	organic grapes claim. So I think that means that
8	we could only the only source of potassium acid
9	tartrate as organic will have to come from those
10	organic wines, and not made with organic wines.
11	So that may be a limiting factor. That's all.
12	MS. SMITH: Questions for Allison. We
13	are like rocking the schedule by the way, guys,
14	I've got to say. Next up, we are going to get into
15	some proposals. And the first one
16	MS. HUSEMAN: I can did sorry,
17	but I'm going to have to turn my
18	MR. POWELL-PALM: We've got two more
19	Sunsets.
20	MS. SMITH: Oh, crap. Sorry, Kim
21	MS. HUSEMAN: No. No problem. You
22	can skip over them.

1	MS. SMITH: All the switching really
2	has my thing my sheet is all wrong. Oh, my
3	gosh. Kim, I'm sorry. Attapulgite and
4	diatomaceous earth.
5	MS. HUSEMAN: Not to worry. I
6	appreciate everybody working with me and my
7	technical errors of not having power at my house
8	for a while, but I'm back up and going. So we will,
9	yes, so attapulgite.
10	So attapulgite is under 605 or,
11	sorry, 205.605(a) non-synthetic allowed.
12	Attapulgite, as a processing aid in the handling
13	of plant and animal oils. Some of these references
14	will be very similar to bentonite. It seems that
15	there are some crossover applications to where you
16	would use one or another. The written comments
17	that we received well, I'll back up here to
18	the questions that we had for the stakeholders.
19	As attapulgite is used as a natural
20	bleaching clay for the purification of vegetable
21	and animal oils. The function of a bleaching clay
22	is to remove undesirable by-products, impurities,

for the vegetable oil and animal fat, 1 2 improving the appearance, flavor, taste, 3 stability of the final product. Attapulgite is manufactured -- it's a clay which is surface mined 4 method, by 5 by open-pit stripping scrapers, 6 draglines, or bulldozers, and extraction by shovels, backhoes, small draglines, or front-end 7 The clay is then loaded onto trucks and 8 loaders. 9 transported to the processing plant where it's then dried, milled, and sieved to obtain the desirable 10 11 range of particle sizes.

So we had asked stakeholders for feedback if it's be -- if attapulgite is being used in organic production today; the industries that would be most impacted with its removal from the National List; and then furthering for health concerns from the mining aspect. I wouldn't say that we received much in the way of the questions that we had asked from stakeholders, but it was angled slightly different in the responses that we did receive.

22 From a certifier standpoint it was

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stated that three, at the most, from two different certifiers, have operations that had attapulgite listed. One of the certifying agency made mention to the 2010 TR, where attapulgite notes that some types of the attapulgite require acid activation to achieve the necessary surface area for final use efficacy and some attapulgites are acid activated, which is treated with a sulfuric or hydrochloric acid to enhance it's bleaching activation for using and clarifying edible and non-edible oils.

Non-acid treated attapulgite is appropriately listed under 205.605(a). If the intent is to to allow for acid activated, that should be listed under 205.605(b). Really we only have it listed as 605(a) and which segues into another certifying body, mentioning that they do verify attapulgite if not acid leeched, acid activated, or acid treated. So there seems to be maybe some clarity concerns as far as the type of attapulgite being utilized, and if it's being utilized sufficiently under it's correct listing.

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1 It should be an annotation or a second listing.

But then to follow up, based off of other comments from interest groups and also listed in, you know, from certifying bodies, the need for attapulgite to be on the National List and strong support to challenge, wanting to hear more from stakeholders who are utilizing attapulgite, and the necessity where maybe bentonite or kaolin is not sufficient, as those are also listed on the National List and mentioned as possible alternatives to be able to remove a substance.

I would say then -- and just, kind of, to follow that up, based off of some survey results, the material does not meet the essentiality criteria. So I want to challenge that, if that's truly the case, or if there is other stakeholders that, you know, come forward and mention how it is a necessity. But it does seem that in past reviews it may have been passed, maybe not out of necessity, but just out of a lack of support to remove it, more or less. So I want some more stakeholder feedback, if we can get it, and then

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to bentonite to challenge the 1 similar activated versus not acid activated and see if 2 3 there's parallels between attapulgite and bentonite. And that's all I have there. 4 MS. SMITH: Ouestions for Kim? 5 6 Go ahead, Liz. 7 MS. GRAZNAK: Good day. This is maybe not specific to attapulgite, but being new, could 8 9 somebody help me better clarify and understand what you're talking about with an (a) versus a 10 (b) 11 listing, like, a first versus a second listing. 12 That is not clear to me. 13 MS. SMITH: Sure. So on the handling list at 14 205.605 here, these are all 15 nonorganic materials that are divided into either synthetic or non-synthetic. And it's a little bit 16 17 different, like I was saying before, whereas like 18 the crops and livestock lists function just a 19 little bit differently in that all non-synthetics 20 or naturals are allowed -- inherently allowed unless they're prohibited. In which case they 2.1 22 would end up on 205.602 for crops or 205.604 for

And then the opposite is true, where 1 livestock. prohibited 2 synthetics unless they're are 3 specifically allowed. So with the handling list, so to be used 4 5 in -- as -- in or on organics -- or products labeled 6 as organic, or made with organic they have to be 7 listed in -- like, there's no assumption that they're allowed. And so whenever we -- whenever 8 a material or substance is petitioned, the first 9 vote that we take is to classify the material. 10 11 And we classify it as synthetic or nonsynthetic. 12 And that's where -- that's then where it gets 13 placed on the list. 14 However, there have been further 15 instructions and guidances developed along the way that have helped the board, and certifiers, and 16 17 review organizations material make those 18 determinations. And so those now, like, live in 19 National Organic Program Handbook, the often 20 referred to as the decision tree, right? So like, the ag/nonag decision tree and 2.1 there's, 22 there's the synthetic/non-synthetic decision

1	tree. And so that helps the board and others make
2	those classification material or classification
3	determinations.
4	But those didn't exist when the list
5	was first developed. And so there have been times
6	where we didn't get it right, or manufacturing has
7	changed, you know, so that's why we, like,
8	re-uplist TRs every so often. And so there often
9	will, either be through a petition, or our own,
10	like, board work where where we will decide that
11	we either want to, like, reclassify a material or,
12	you know, move it around a little bit.
13	Does that answer your question, Liz?
14	Okay. Any other questions for Kim?
15	Okay. You want to move to diatomaceous
16	earth.
17	MS. HUSEMAN: Yes. And thank you for
18	that explanation, Kyla. It was very well said.
19	MS. SMITH: Thank you.
20	Yes. And this is just, Jared, an open
21	invitation to, like, if I'm saying anything that
22	is not correct, like, please jump in at any point,

1	Jared or Andrea, to correct me.
2	MS. HUSEMAN: That was great.
3	Okay. So we'll move forward with the
4	final handling Sunset item today which is
5	diatomaceous earth, so specifically listed under
6	205.605(a) as a nonsynthetic allowed, for food
7	filtration aid only. Diatomaceous earth has
8	several applications, very specifically looking
9	for this the food filtering aid. So
10	diatomaceous earth, or also referenced as DE used
11	as a filtering aid in food productions of syrups,
12	juices, beer, beverages, and other products.
13	Diatomaceous earth is made from the
14	fossilized remains of diatoms. Their skeletons
15	are made of a natural substance called silica.
16	Diatoms accumulate in the sediment of rivers,
17	streams, lakes, and oceans, and is mined in
18	quarries or open pits.
19	So questions to our stakeholders were,
20	Is the continuing use of DE today is there
21	continuing use of DE today in organic production.
22	Have there been any changes in the environmental

1	issues? And are there alternative filtration aids
2	allowing for the removal of DE on the National List?
3	Overwhelmingly, from several responses that we
4	received is that the need for diatomaceous earth
5	in the production very specifically, the Juice
6	Products Association did comment saying that DE
7	is being used and it's needed and to not get off
8	the list.
9	That Moser also mentioned that it
10	from a handling perspective although it's
11	mainly used as a pest control in the use of food
12	production it is needed. From a syrup production
13	standpoint there was a four out of five necessity
14	ranked for the ability to produce maple syrup, and
15	the need for diatomaceous earth in that particular
16	arena, you know, for you to be able to remove the
17	insolubles and the impurities, there's a need in
18	the organic states. I do not have any commenters
19	that opposed it to be relisted, so felt like it
20	was pretty straightforward.
21	That's all I've got, Kyla.

Thanks, Kim.

MS. SMITH:

1	Any questions for Kim on diatomaceous
2	earth?
3	Okay. Now we are through Sunsets.
4	Thank you for bearing with me fumbling around like
5	that. And now we will move to the proposal on CPC,
6	and I will pass to Wood.
7	MR. TURNER: Thanks, Kyla.
8	We have a petition material that is
9	called cetylpyridinium chloride. I will never say
10	that again over the course of this session and I'll
11	call it CPC from here on out, but and I want
12	to just preface by saying, I am a torch carrier
13	on this particular petition for our former
14	colleague, Dr. Asa Bradman, who did most of the
15	work on this, prior to his rotating off of the
16	Board. So I hope you will you all give me as
17	much generosity in your in my non-technical sort
18	of description, my non I'm not a doctor, of this
19	material. But it's I just want to preface it
20	that way.
21	So we have a material here that's been
22	petitioned as an antimicrobial processing aid

specifically for application onto poultry 1 poultry parts at slaughter or processing plants. 2 3 And it's being petitioned to be listed at 605(b) synthetic, nonagricultural, nonorganic substance 4 allowed in or on processed products labeled as 5 organic or made with organic ingredients. 6 Ιt would be added to water as a drench or dip to reduce 7 of populations foodborne pathogens 8 such as salmonella and compylobacter that may be present 9 10 on raw poultry. 11 The proposed listing would indicate, 12 CPC antimicrobial food treatment for use according The petition came in -- end 13 to FDA limitation. of 2019, amended in early 2021. 14 TR was found 15 sufficient -- or was produced and found sufficient in August of '21, and we're moving it forward here 16 17 today. 18 There's a few issues that I -- and I know you all have made -- give materials in the 19 20 Actually, fairly few -- we didn't hear comments. very much from folks in the -- in our oral comments, 2.1 22 but there were some -- a significant number of

comments in our written comments. So there's a few issues and I just want to try to summarize them for you.

So one of the most fundamental relates to the fact that what we're talking about here is a material that is in a class of substances referred to as QACs, or quaternary ammonium compounds. these are, you know, microbicides. We're talking about a material that has -- a set of materials that has sort of risen in prominence, I think, over course of our confusion, our collective obsession with what to do about COVID-19. we've seen a lot of concern and a lot of -- a rise in the use of these materials. They're very powerful materials that are antimicrobial nature and have -- many have indicated there's a number of, you know, impacts both into human health to the environment associated from and associated with QACs.

So I'll say that. There's also a concern in this material that when you apply something like this, that QAC or that material is

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going to be -- there will be residues from that 1 material not only on the surfaces, but also on the 2 3 meat that's being treated with that material. Another issue relates to sort of this, 4 I guess, there are two issues that are kind of 5 6 looming fairly really large, I think, in petitions 7 like this. We have an ongoing -- some of you are aware of this, we have an ongoing process to try 8 to understand where and how we review sanitizers. 9 10 What is the appropriate rotation of sanitizers 11 in Organic? How do we evaluate the sanitizer 12 toolkit? How do we ensure that in Organic we are meeting the expectation that the consumer has, 13 relative to food safety but not doing 14 15 indiscriminately, not introducing new materials that are inconsistent with Organic. 16 17 And so this is an important issue and 18 this would be, you know, this petition which would 19 sort of introduce a new sanitizer into the mix. 20 Not necessarily -- it doesn't necessarily suggest -- it's not -- it doesn't necessarily provide any 2.1 helpful guidance to us on sort of what the right 22

rotation and what the right review of sanitizers 1 It would just be a new sanitizer and 2 needs to be. 3 an extremely powerful antimicrobial as a result. I'11 indicate that also have 4 we antimicrobial petition in the mix as well. 5 on a different timeline from this material. 6 So 7 that's important to consider.

> And then perhaps, maybe most important here is the idea that we -- that in order to produce CPC, you have to use a material -- an ancillary other material called propylene glycol to complete the formulation. And it's outlined -this process is outlined in full in the TR. not even going to begin to explain it to you, but it does raise important questions because we don't have any guidance in handling reviews -- for how review materials -- ancillary and other materials like propylene glycol. And so it is a functional requirement -- to be able to use CPC, you have a functional requirement to use propylene glycol. And so this is a complicated issue.

> > That said, so no clear -- got no clear

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pathway on sanitizers. No clear pathway on ancillary or other materials, and how to review them. However, the subcommittee in its discussions believe that for the other reasons that I've articulated related to the use of QACs and the use -- and the residue issue, for example, that we could review this material on the merits outside of those other few considerations. So that's kind of where we are.

So there is a, you know, there -- I won't go through the history of, kind of, the discussion between the NOP and the NOSB. I'm not even sure I fully have internalized it myself in terms of sort of how to understand this other ingredient Only to say that there have been, you know, at least as far back as 2011 and probably further, ongoing discussion back and forth related to how to think about this idea of other materials or ancillary materials. So we're sort of in a situation where we're sort of thinking ancillary materials like propylene glycol and kind of, I think, accumulating this list of these

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materials that are required to sort of move other
products forward.

And when the NOP provides guidance to to appropriately review ancillary how substances, we can begin -- we can sort of take into consideration how to do that. Again, I don't I don't want to confuse the want to get confused. issue here because I am suggesting that we have a discussion on this material on the merits outside of the ancillary material issue, and outside of sort of the sanitizer reviews. Because I think it has some of the unique considerations that are important, including, I should say, very strong community concern about the material in our written comments, and specifically about this issue of quaternary ammonium compounds, quats, OACs, however you want to refer to them, that are considered to be -- considered to leave persistent thought of residues, and are by non-profit organizations, by certifiers, by individuals who commented to us that they're not consistent with organic principles.

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1 You all have seen these comments as I think, you know, we -- you know, it's --2 well. 3 I think it's been unusual in my tenure on the board see such sort of emphatic language about 4 material as I've seen related to this material. 5 I'm sure there are others -- other examples, but 6 I think people have been shocked to see a material 7 like this come before the Board for consideration. 8 9 That said, you know, the industry as a whole, suggests that it's a critical material. 10 11 One thing that, you know, one thing that 12 I noted, that I've been sort of wrestling with in my brain, is this idea that somehow CPC ensures 13 higher quality meat than other sanitizers. 14 15 I have a really hard time with that. I can't quite -- I can't get my head around that. I don't want 16 to get on a soap box about it, but I don't understand 17 18 that. As a regular consumer of organic poultry, 19 I just don't -- I just can't -- I think we're talking 20 about something that for me almost goes to the same level as sort of the obsession that we see in the 2.1 22 marketplace around imperfect food.

I mean, you know, I'll eat your apples 1 anyday, Brian, with a spot on them. I don't care. 2 3 I don't -- I'm not saying that's analogous to this, but I'm suggesting that somehow the food quality 4 statement that I've heard from the industry and 5 some of the comments are overstated. 6 Not to take 7 anything away from the concern about the pathogens we're talking about here. 8 These are important considerations. 9 And I think if -- I don't want to 10 11 suggest, I don't want to diminish or minimize in 12 any way kind of a need to ensure food safety for the consumer. On the other hand, at what cost, 13 and what, you know, what do we have to do to provide 14 15 that? And I'm not at a place myself in this review 16 where I feel like this material is necessary to be able to ensure that. I know there's -- there 17 18 seems to be some concern from the industry in some 19 of their comments that it's, you know, that I'm wrong on that, but I'll leave that there. 20 Let me see what else I wanted to add 21 22 here.

I think that's probably all I want to 1 say for the moment, Kyla, on this. I think we 2 3 should open it up for discussion and you and I, and others who have been involved in this process 4 with Asa can try to take whatever questions may 5 6 exist on this, and I'll stumble through them or clumsily try to handle those questions that I can, 7 but that's where I am. 8 9 MS. SMITH: Yes. Thank you so much, 10 Wood, for your work on this and taking this over 11 from Asa. I know it was no small task and, like, 12 yes, I 100 percent have your back and will answer the questions as best as we can. 13 14 Rick, go ahead. 15 MR. GREENWOOD: Yes. First of all. Wood, I feel your pain. These are tough issues. 16 17 And I think there's always this push to have more 18 disinfectants because of generating resistance in 19 microbial organisms. And so the industry wants a lot of choices, so they can use one thing for 20 a while and then switch so they don't do it. 2.1 22 concern with the quats besides the residue is they

have some real limitations and there's a tremendous 1 amount of literature on the fact that, 2 3 instance, pseudomonas aeruginosa can grow very nicely in quats. 4 And I've had real experience with that 5 doing hospital microbiology where they used to 6 7 disinfect indwelling catheters between patients and ended up giving them pseudomonas because it 8 9 was growing in the disinfecting solution. So I've never liked it. That's a personal thing because 10 11 I've seen problems with it and I don't know 12 basically if it's really necessary considering the other choices that we have. I know we're always 13 14 pushed to add one more, so we have lots of, as 15 everyone says, tools in the toolbox. But I don't know if this is a particularly good one to add. 16 17 MS. SMITH: Allison? 18 MS. JOHNSON: Thanks so much for the 19 It was really easy to follow. overview. 20 just wanted to add that when I saw this on our voting list for my first meeting, I was actually kind of 2.1

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1	straightforward from my certifying days. Quats
2	were the no, no. It's, like, hard line, oh, it's
3	a quat, not allowed. So it seems like a really
4	straightforward decision to me. It's not
5	compatible with the, you know, practices that have
6	been in place for 20 years. And I don't see any
7	reason to add it now.
8	MS. SMITH: Thanks, Alison.
9	I'll add too that PCO certifies a decent
LO	amount of poultry operations. And to my
L1	knowledge, we have not had any operators inquiring
12	about use of CPC or any type of quat as a indirect
13	through contact, as a carcass wash.
L 4	Dilip.
L5	MR. NANDWANI: Well, I'll just add a
L 6	quick comment as I shared on subcommittee, that
L7	there are a few reports available in the scientific
L8	community which says about these residues on the
L 9	poultry skin. And also there was a concern having
20	some infection in pulmonary cells in humans as
21	well. There are some good reports available which

I had shared. So I just wanted to add that. Thank

1	you.
2	MR. TURNER: Thanks, Dilip.
3	MS. SMITH: Thanks, Dilip.
4	Logan.
5	MS. PETREY: Hi. Thank you. This is
6	more directed towards Kyla on follow-up to that
7	certifying poultry places. Have you noticed that
8	there's an issue with sanitizers not working and
9	salmonella breaking either or they in trouble
10	and needing something?
11	MS. SMITH: Not to my knowledge. But
12	I don't know, things sort of only filter up to me
13	when it's dire, like, straits. But I haven't heard
14	anything from, like, our review side, or our
15	inspections team along those lines.
16	MS. PETREY: Because I was expecting
17	a little bit more, you know, if there was a case,
18	more commenters to say that there was a need. And,
19	Wood, I don't know, I didn't see enough
20	MR. TURNER: It was limited.
21	MS. PETREY: the more except,
22	probably it came from maybe the producers of the

products, more 1 than SO the growers or the 2 producers. So, okay. Thank you. 3 MS. SMITH: Kim. Maybe just to 4 MS. **HUSEMAN:** Yes. 5 follow up on that aspect, both the comment and the Stakeholders that I are in contact with 6 question. have not mentioned a need for additional products 7 in order to safely produce poultry products. 8 9 I guess then my question to Wood would be, did you 10 find that there were stakeholder comments, 11 requesting and needing a product such as CPC, in 12 addition to current practices, in order to maintain safe product in the poultry industry? 13 14 MR. TURNER: Yes. I think as Logan 15 just alluded to Kim, and I appreciate you asking the question directly, there were, I mean, there 16 17 were -- there was a comment from a producer 18 suggesting -- a large producer that suggested that 19 it would be beneficial, to use Rick's words, a 20 beneficial addition to the tool kit. But not a 2.1 flood of comments by any stretch of 22 imagination. I think the only real comments we

1 heard in the written comments in support of that were from that one large producer and from the 2 3 petitioner. So I'm particularly interested in your perspective on that, Kim, so I appreciate you 4 weighing in. 5 MS. SMITH: 6 Mindee. 7 Thanks. MS. JEFFERY: I -- in the write up, I really appreciated the emphasis of the 8 -- that CPC is non essential, and that the organic 9 10 poultry industry is supported by existing materials, and that we are in compliance with food 11 safety standards. And I'm concerned with this 12 notion it -- that the -- it's expected to remove 13 the majority of CPC from treated surfaces, but that 14 CPC residues have been found on poultry skin. 15 And I got to tell you, this is a customer 16 service nightmare waiting to happen at the good 17 earth because our customers are highly educated. 18 And if somebody started telling them that there 19 was quats in their chicken skin, they're going to 20 walk up to the meat counter and they're going to 2.1 22 ask the first person, which one of these organic

chicken companies that you carry doesn't use quats 1 in their processing? And then we're going to go 2 3 back and try to split that hair. And the danger here for me is that, 4 like, long-term titration of consumer investment 5 And I, like -- I'm a nerd. 6 in organic. independent natural food retailers and I 7 And I've spent 20 years going around the 8 co-ops. country, every time I was at a trade show, trying 9 to get into every single one of them I could and, 10 11 like, walk in and ask harder customer service 12 questions to kind of see where we are with organic education. 13 And it's a tough one, man. 14 You really 15 have to work hard to get that customer service level, like, real organic enthusiasts, where you 16 17 get great answers from every person in the store. 18 And this one would really not. And so I really 19 feel strongly that this is a -- this is not 20 something that we can do to customer service in organic land right now. Because if we don't need 2.1

it in the poultry industry, we certainly don't need

this question in the customer service interaction. 1 2 MR. TURNER: Yes. Yes. Totally. If we were in person, 3 MR. POWELL-PALM: I could just start clapping right now. 4 5 MS. SMITH: That was so good, Mindee. Well said, Mindee. 6 MR. TURNER: 7 only have one more point to that. And I -- there will be people -- I mean, I don't want to preempt 8 our vote here, Kyla. But there will be people in 9 the community who will say -- who might say, well, 10 11 I mean, this is -- CPC is in every mouthwash and 12 toothpaste that we use every single day. And first of all, it's not in every mouthpiece -- mouthwash 13 and toothpaste we use every single day. And second 14 of all, if the FDA says it's safe in mouthwash and 15 toothpaste it doesn't mean it's consistent with 16 organic principles. And I just -- I want to make 17 18 that distinction really clear. They're not the same thing. And we're not charged with the same 19 mandate. And so we have to represent the point 20 of view that we have here as an organic community 2.1 22 on materials like this, so --

1	MS. SMITH: That's what it's, like,
2	100 percent on the nose.
3	Rick.
4	MR. GREENWOOD: Yes. Just one final
5	comment and I think that's what's great about
6	Organic, is that we keep this wall up. And I'll
7	give you the example of aspirin. I don't know how
8	many of you saw that for years they've talked about
9	taking aspirin to prevent heart attacks and
10	physicians do it. And what was it, two days
11	ago, suddenly it's said, that's not a good idea.
12	You shouldn't do it. And so I think our plan is
13	to keep all of these things out, so we don't have
14	to come back to people ten years later and say,
15	huh, sorry, you got cancer because we allowed this
16	in. I think that's what people look to for
17	Organic. So I think having a strict line is
18	actually very important.
19	MS. SMITH: Okay. I'm seeing no more
20	hands, but this is a biggie, so I don't want to
21	rush the time. And we're doing pretty good. So
22	feeling ready to vote?

1	MR. TURNER: Kyla, can I just say one
2	thing. So well, maybe I'm preempting. Sorry.
3	I wanted to, I guess, clarify, the way we've
4	articulated the motions. Is that appropriate at
5	this point?
6	MR. GREENWOOD: It definitely is.
7	Yes. I want to make sure we get this right.
8	MR. TURNER: Okay. Right. So we
9	so I just want to make sure I'm going to let
10	Kyla manage Kyla, as chair, manage this. But
11	it there is a will there will be a I'll
12	be making a motion about the classification of this
13	material. I'm also making a motion about the
14	material that would suggest if it were approved,
15	it can only be approved can only be used with
16	propylene glycol. So that's an important part of
17	this. So we are adding that stipulation to the
18	motion so you're aware that what we're voting for
19	is something that would place it outside of a clear
20	process. Kyla, can you help me with that?
21	MS. SMITH: Sure. Yes. So we'll take
22	two votes, again, like I was describing before.

1	MR. TURNER: Yes.
2	MS. SMITH: We have to this is a
3	petition material. So it's not a Sunset material.
4	MR. TURNER: Right.
5	MS. SMITH: So this material first
6	needs to go through a classification motion. So
7	that's the first motion. It's on the screen. And
8	both of these motions come first and seconded out
9	of the subcommittee so we don't need to redo that,
10	correct? So they just come first and seconded and
11	we don't have to go through the whole motioning
12	process. And so we'll just I'll read them into
13	the record as such and then we'll proceed with the
14	vote.
15	For the National List motion and
16	again, I'm going to try I don't want to confuse
17	everybody. So because but this will be, in the
18	fall when we're having to vote on Sunsets, a little
19	bit more complicated because we are sort of having
20	to flip back-and-forth with your yeses and nos.
21	But for this motion, the National List motion,
22	it is to add. And so a no vote would be to not

It would not appear on the list. And just 1 to clarify that there is an annotation as it is 2 3 on the screen there, CPC can only be used in glycol formulation with propylene 4 per And so that would be listed. 5 requirements. Ιf it were to pass and be added, that is how it would 6 7 be annotated so that propylene glycol would be allowed in the formulation. Is that all clear? 8 9 MR. POWELL-PALM: I think so. So no 10 vote keeps it from being added to the list. vote kills it. 11 12 MS. SMITH: Correct. Just wanted to 13 make sure that the annotation part was clear as 14 well. Okay. 15 MR. TURNER: I guess the point I want to -- I guess you're right about that, Nate. 16 Τ just want to make sure that it's clear that in no 17 18 context, even if there were a yes, even if it 19 passed, there's no way this material could be used 20 at all without propylene glycol in the formulation, which adds another layer to its listing. With --2.1 and another way, if it was -- I'm not saying that 22

1	right. I'm not saying that are you following
2	me?
3	MR. POWELL-PALM: I am. Yes. I was
4	just quietly looking at the comments because that
5	was that confusion was voiced as well.
6	MR. TURNER: Oh. It was. I didn't
7	know.
8	MR. POWELL-PALM: Yes. I think we're
9	landing right. Does anyone else have any
L 0	questions about this annotation? Are we tracking
L1	together, that we're talking about CPC with the
12	propylene glycol as the only space in which it could
13	exist? And then we're going to vote on, does it
L 4	exist on our National List at all?
L5	MS. SMITH: And our understanding was
L 6	that, like, it was required to be formulated by
L7	FDA with the use of propylene glycol. So they're
L8	like a package deal.
L 9	MR. POWELL-PALM: Yes.
20	MS. SMITH: Okay. I'm going to move
21	to the vote.

MR. POWELL-PALM:

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All right.

1	MS. SMITH: All right. So first we'll
2	take the wait a minute. I got to get my
3	spreadsheet up. I'm, like, doing this in the
4	secretary thing, so
5	MR. POWELL-PALM: Totally good. And
6	I can track with you for that. If you and I could
7	and I can switch roles with you for a second
8	to take notes.
9	MS. JEFFERY: I got it.
10	MS. SMITH: My handy dandy spreadsheet
11	does most of the work for me, so I just wanted to
12	make sure I was up and ready, but thanks for the
13	backups.
14	Okay. So classification motion first.
15	And the motion or the voting will start with
16	Brian.
17	And so the motion comes first and
18	seconded out of subcommittee. The motion is to
19	classify CPC
20	Wood, can you say real name for me.
21	MR. TURNER: Cetylpyridinium
22	chloride.

1	MS. SMITH: Thank you.
2	CPC as a nonagricultural synthetic
۷	CrC as a nonagriculturar synthetic
3	substance. It was motioned by Wood and seconded
4	by Kyla Smith, myself. And the vote starts with
5	Brian and I'll turn it to you, Nate, to call the
6	vote.
7	MR. POWELL-PALM: Sure.
8	MS. SMITH: Oh. Wait. I'm sorry.
9	MR. POWELL-PALM: Go ahead.
10	MS. SMITH: Any further discussion?
11	MR. POWELL-PALM: Hearing none.
12	We'll move to the vote.
13	Brian, please go ahead.
14	MR. CALDWELL: Yes.
15	MR. POWELL-PALM: Jerry.
16	MR. D'AMORE: Yes.
17	MR. POWELL-PALM: Carolyn.
18	MS. DIMITRI: Yes.
19	MR. POWELL-PALM: Rick.
20	MR. GREENWOOD: Yes.
21	MR. POWELL-PALM: Liz.
22	MS. GRAZNAK: Yes.

1	ME	R.	POWELL-P	ALM:	Kim.
2	MS	S.	HUSEMAN:	Yes.	
3	ME	R.	POWELL-P	ALM:	Mindee.
4	MS	S.	JEFFERY:	Yes.	
5	ME	R.	POWELL-P	ALM:	Allison.
6	MS	S.	JOHNSON:	Yes.	
7	ME	R.	POWELL-P	ALM:	Dilip.
8	ME	R.	NANDWANI	: Yes	s.
9	ME	R.	POWELL-P	ALM:	Logan.
10	MS	S.	PETREY:	Yes.	
11	ME	R.	POWELL-P	ALM:	Kyla.
12	MS	S.	SMITH:	Yes.	
13	ME	R.	POWELL-P	ALM:	Wood.
14	ME	R.	TURNER:	Yes.	
15	ME	R.	POWELL-P	ALM:	Javier.
16	ME	R.	ZAMORA:	Yes.	
17	ME	R.	POWELL-P.	ALM:	And the chair votes
18	yes.				
19	MS	S.	BRUCH:	Nate,	I also vote yes.
20	ME	R.	POWELL-P	PALM:	I'm sorry. Did I
21	totally skip	λo	u? Plea	se for	give me.
22	MS	S.	BRUCH:	Don't	go right around the

1	other side again.
2	MR. POWELL-PALM: Oh, yes. I'm sorry.
3	Yes. You're at the top of
4	MS. BRUCH: the pack.
5	MR. POWELL-PALM: I won't make that
6	mistake again. You made us look
7	MS. BRUCH: No worries.
8	MR. POWELL-PALM: Thank you, Amy.
9	MS. BRUCH: Yes.
10	MS. SMITH: Okay. So I have 15 yes,
11	0 no, 0 abstentions, recusals, or absents. So the
12	motion passes.
13	Okay. The second motion comes first
14	and seconded out of a subcommittee. The motion
15	is to add CPC with the following annotation. CPC
16	can only be used in formulation with propylene
17	glycol per FDA requirements. And it was motioned
18	by Wood and seconded by myself. The voting will
19	start with Jerry. But before that, any further
20	discussion?
21	MR. POWELL-PALM: Hearing none, we'll
22	go to the vote.

1	Jer	ry, please go ahead.
2	MR.	D'AMORE: I vote no.
3	MR.	POWELL-PALM: Carolyn.
4	MS.	DIMITRI: I vote no, also.
5	MR.	POWELL-PALM: Rick.
6	MR.	GREENWOOD: No.
7	MR.	POWELL-PALM: Liz.
8	MS.	GRAZNAK: No.
9	MR.	POWELL-PALM: Kim.
10	MS.	HUSEMAN: No.
11	MR.	POWELL-PALM: Mindee.
12	MS.	JEFFERY: No.
13	MR.	POWELL-PALM: Allison.
14	MS.	JOHNSON: No.
15	MR.	POWELL-PALM: Dilip.
16	MR.	NANDWANI: No.
17	MR.	POWELL-PALM: Logan.
18	MS.	PETREY: No.
19	MR.	POWELL-PALM: Kyla.
20	MS.	SMITH: No.
21	MR.	POWELL-PALM: Wood.
22	MR.	TURNER: No for me.

1	MR. POWELL-PALM: Javier.
2	MR. ZAMORA: No.
3	MR. POWELL-PALM: Amy.
4	MS. BRUCH: No.
5	MR. POWELL-PALM: Brian.
6	MR. CALDWELL: No.
7	MR. POWELL-PALM: And the chair votes
8	no.
9	MS. SMITH: Okay. I have 0 yes, 15 no,
10	O abstain, recuse, or absent. The motion fails.
11	MR. POWELL-PALM: All right.
12	MS. SMITH: Okay. Switching gears.
13	We are going to phosphoric acid and I will be
14	presenting this.
15	So phosphoric acid was petitioned to
16	expand annotation to also allow in addition to its
17	current allowance of cleaning of food-contact
18	surfaces and equipment, to be used as an acidifier
19	to adjust pH of an extraction solvent to extract
20	antioxidants or other target molecules from
21	lamiaceae plants, provided the amount of acid shall
22	used shall not exceed the minimum needed to lower

pH to 2.5. So we asked a few clarifying questions that you can see on the screen there, which we didn't really receive direct answers to in the public comment process.

Most public or most commenters felt like additional information such as the answers to those questions that we posed in the proposal were needed prior to being able to vote on this substance. We do appreciate all the feedback that was provided and we will take this back to subcommittee to do more work. So that is my recommendation, is to actually vote this back to subcommittee. But I'm happy to answer any questions.

Go ahead, Brian.

MR. CALDWELL: Kyla, I just had a question about this. First of all, just so everybody knows, the lamiaceae is the mint family, so that's, you know, that's the kind of plants that they're talking about. But I didn't see any explicit information as to how the extraction was going to actually, you know, what the process was

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1	that involved the phosphoric acid to extract
2	whatever they're extracting from these plants.
3	So that's just to me, it was a little bit of
4	a gap. And just to make sure any materials that
5	are used in that extraction, like solvents or
6	whatever, have to do they have to be on the
7	National List in some way also? Or are they
8	considered to be just not in well anyway, how
9	is that handled, you know, the actual extraction
10	process for this sort of thing?
11	MS. SMITH: Look at the
12	MR. CALDWELL: They talked a lot about
13	how phosphoric acid was extracted from the brew
14	that produces phosphoric acid, but they didn't talk
15	about how, say, you know, a sugar or a or some
16	kind of organic acid, or something like that, would
17	be extracted from the mint plants.
18	MS. SMITH: Yes. I think that that
19	was, like, part of our struggle, yes, was fully
20	understanding
21	MR. CALDWELL: Yes.
22	MS. SMITH: Yes. The exact

1	functionality as well.
2	MR. CALDWELL: Very good. Thank you.
3	MS. SMITH: Any other questions?
4	MR. POWELL-PALM: Hearing none, do you
5	want to make a motion, Kyla, to send back?
6	MS. SMITH: Yes. So I will make the
7	motion to send phosphoric acid annotation change
8	proposal back to subcommittee.
9	MR. POWELL-PALM: And do we have a
10	second?
11	MS. JEFFERY: I'll second.
12	MR. POWELL-PALM: All right. So we
13	have a motion to send back to subcommittee. And
14	we're going to start the vote
15	MS. SMITH: Nate.
16	MR. POWELL-PALM: Yes?
17	MS. SMITH: Sorry. Any further
18	discussion just for process-wise?
19	MR. POWELL-PALM: Yes.
20	MS. SMITH: Usually there's not but,
21	you know.
22	MS. PETREY: I'm sorry, Nate, can you

1	verbalize who made that second I missed that.
2	MR. POWELL-PALM: Yes. So the motion
3	was made by Kyla, seconded by Mindee.
4	And we'll start the voting to go back
5	to subcommittee with Carolyn.
6	MS. DIMITRI: Yes. Let's send it
7	back.
8	MR. POWELL-PALM: All right. Rick.
9	MR. GREENWOOD: Yes.
10	MR. POWELL-PALM: Liz.
11	MS. GRAZNAK: Yes.
12	MR. POWELL-PALM: Kim
13	MS. HUSEMAN: Yes.
14	MR. POWELL-PALM: Mindee.
15	MS. JEFFERY: Yes.
16	MR. POWELL-PALM: Allison.
17	MS. JOHNSON: Yes.
18	MR. POWELL-PALM: Dilip.
19	MR. NANDWANI: Yes.
20	MR. POWELL-PALM: Logan.
21	MS. PETREY: Yes.
22	MR. POWELL-PALM: Kyla.

1	MS. SMITH: Yes.
2	MR. POWELL-PALM: Wood.
3	MR. TURNER: Yes.
4	MR. POWELL-PALM: Javier.
5	MR. ZAMORA: Yes.
6	MR. POWELL-PALM: Amy.
7	MS. BRUCH: Yes.
8	MR. POWELL-PALM: Brian.
9	MR. CALDWELL: Yes.
10	MR. POWELL-PALM: Jerry.
11	MR. D'AMORE: Yes.
12	MR. POWELL-PALM: And the chair votes
13	yes.
14	MS. SMITH: I have 15 yes, 0 no, 0
15	abstain, recuse, or absent. The motion passes.
16	MR. POWELL-PALM: Very good.
17	MS. SMITH: Okay that concludes the
18	handling subcommittee report. And I will hand it
19	back to you, Nate.
20	MR. POWELL-PALM: All right. Thank
21	you, Kyla. That was a lift. So thank you so much
22	for your leadership and everyone's hard work. I

think watching those votes and watching this 1 deliberation and collaboration is just a beautiful 2 3 picture of how this board can work so effectively. And we're ahead of schedule. 4 So please, 5 everyone, pat yourselves on the back because that 6 was a heavy lift and we did it really well. 7 So we are moving into lunch and we're 8

about 14 minutes early. After lunch, we're going to be going to hear a report on the state of organic seed by Kristina Hubbard, followed by a report from Mat Ngouajio -- I apologize if I'm getting that wrong with NIFA. So we'll hear some interesting updates after lunch and then we'll move into the materials subcommittee. So I think if it's all right with everybody, we will just take these 13 minutes to grab an extra bite. All right. will be back at the top of the hour, 2:00 p.m. Eastern Time. Nope. Sorry. It is 2:00 p.m. Let me just -- this is why I don't Eastern Time. try to do the time zones. Michelle, do you have a slide for -- it will just be the top of the hour, 1 hour and 13 minutes from now.

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1	MS. ARSENAULT: They're working on
2	adjusting the time for the slide, so
3	MR. POWELL-PALM: All right. Thank
4	you, everybody.
5	MS. ARSENAULT: Thanks, Nate.
6	Thanks, everyone
7	MR. POWELL-PALM: See you all in a bit.
8	(Whereupon, the above-entitled matter
9	went off the record at 1:47 p.m. and resumed at
10	3:00 p.m.)
11	MR. POWELL-PALM: All right. Here we
12	are. Welcome back, folks. Hope everyone had a
13	good break. To get our afternoon kicked off, we're
14	going to start with a presentation from Kristina
15	Kiki Hubbard with the Organic Seed Alliance. And
16	I always have to give a shout out to my fellow
17	Montanans. So I'm really glad that Kiki can join
18	us today, and we'll have what I hope to be a great
19	discussion around certified organic seed.
20	So with that, I'll hand it over to you,
21	Kiki.
22	MS. JEFFERY: Well, just kidding,

1	Wood, you're handing it over to Mindee to introduce
2	Kiki.
3	MR. POWELL-PALM: Oh, I apologize.
4	I'm handing over to Mindee.
5	MS. JEFFERY: And I just called you
6	Wood
7	MR. TURNER: And you just called Nate
8	Wood, you can call Nate me. Yes.
9	MS. JEFFERY: so it's even better.
10	What's your name?
11	MR. POWELL-PALM: Take it out. So
12	please proceed.
13	MS. JEFFERY: Kiki Hubbard is the
14	director of advocacy and communications for the
15	Organic Seed Alliance. Her work on seed policy
16	spans 20 years in the areas of antitrust,
17	biotechnology, consolidation, intellectual
18	property, and organic regulation. Growing up in
19	Wisconsin and working on an organic farm piqued
20	her interest in sustainable agriculture and
21	environmental justice. She went on to pursue

related law and policy issues in Washington DC

1	before moving to Montana to complete an MS in
2	Environmental Studies. Kiki now leads OSA's
3	federal policy work and manages the State of
4	Organic Seed project, where she has co-authored
5	all three SOS reports, spanning 15 years. She
6	lives in Missoula with her family in a very generous
7	garden. Thank you so much for all your work, Kiki,
8	I really look forward to your presentation.
9	MS. HUBBARD: Thanks so much, Mindee.
10	Let me share my screen here I'll save mine too.
11	All right. Thanks. I'll give you a second. Oh,
12	here we go. I think I've done this enough times.
13	All right. Can everyone see it okay?
14	Thank you again, Mindee, for the
15	introduction. And I feel really honored to be a
16	part of a meeting to share findings from our State
17	of Organic Seed report. So thanks to the National
18	Organic Program and the NOSB for inviting Organic
19	Seed Alliance to be on the spring agenda. We don't
20	have a lot of time today so I'm going to jump right
21	into it.

But first I just want to share that,

for those of you who aren't familiar with Organic Seed Alliance, we are a mission driven organization that works nationally to ensure that growers have to the organic seed they need to be successful. And we do this through research, education, and advocacy. I want to quickly also mention that my co-worker, Jared Zystro, who is also a co-author at State of Organic Seed is joining us today and available to answer questions in the chat and provide other information during my presentation. So shout out and thanks to Jared for joining us today. Oops. Excuse me.

Seed Alliance monitors the status of organic seed systems in the United States. And by status, I mean everything from how much organic seed organic growers are using, to barriers to sourcing organic seed, as well as how the organic seed regulation is being enforced, and how many public resource dollars are going toward much needed organic plant breeding and other organic seed research initiatives.

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So every five years, we release this
progress report to answer these and many other
questions to help us understand these trends. And
to also publish recommendations that serve as an
action plan for increasing the organic seed supply,
while also fostering seed-growing networks, and
policies that aim to decentralize ownership in our
seed systems. We know that the dominant
conventional seed trade, which is highly
consolidated and privatized, is not providing the
seed that organic growers need to be successful.
And we also know that the benefits of expanding
organic seed, both in the field and marketplace,
go well beyond simply helping organic producers
meet a regulatory requirement.
We believe strongly that the other
benefits include ensuring that organic growers
have access to organically bred varieties that are
especially well adapted to organic production
systems and practices, and that are resilient in
the face of our changing climate. We know that
this will help organic growers be more successful

when they have plant genetics that are best suited to their operation. We also know that the benefits of expanding certified organic production allows to enjoy the broader benefits of simply expanding organic agriculture more broadly, including having fewer synthetic chemical inputs on our food and in our landscape, thus benefiting the environment and human health as well.

Our most recent report is our third update. We now have 15 years worth of data to help us understand organic seed trends. Again, trends organic seed sourcing, organic in research investments, and much more. And our most recent report includes more data than we have ever collected before. And I'll give you a snapshot of some of these methods and the data that we collected in order to put together our findings and recommendations.

First we conducted a national survey of organic producers in partnership with Organic Farming Research Foundation. And these findings informed OFRF's national organic research agenda

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then the seed related questions informed our State of Organic Seed report. We also conducted an in-depth survey of organic seed producers, as well as organic seed companies to better understand their challenges in organic seed production, including how to scale up their production. we surveyed organic plant breeders in research, as well, to better understand their successes in their research programs as well as ongoing needs and challenges. We surveyed organic certifiers to better understand how they're enforcing the organic seed regulation and what tools and resources they needed to support their role as certifiers. of producers Some the seed and companies that responded to our survey agreed to an in-depth interview with our team. We also compiled, as we do every five years, a database of public research investments going to organic plant breeding and other organic seed research.

which I strongly encourage you to check out.

And then, finally, we pulled from our friends at

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Organic Farming Research Foundation again, poll data from 16 focus groups that they hosted across the country that included more than 100 organic producers. So we have a lot of data.

What did we find? I'm going to start by giving you a few findings from our organic producers survey. Unfortunately, one of our main findings is that most organic producers still use nonorganic seed for at least part, if not all of their operation. As you see here in this graph, the percentage of producers using only organic seed, so 100 percent organic seed on their operation has remained stagnant since we started collecting this data, again, 15 years ago.

By crop type we see that organic seed sourcing has also remained generally stagnant across field crops, cover crops, and forge crops.

Here you're looking at the percent of field crop acreage planted to organic seed. We actually saw a decrease in acreage planted to organic seed among field crop growers. The next graph here shows essentially, again, stagnation in forge crop

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acreage planted to organic seed. And this last 1 2 graph shows a similar trend in cover crop acreage. 3 Now one bright spot is that we found that vegetable producers who grow fewer than 50 4 acres reported using more organic seed. 5 So this 6 was definitely, again, a bright spot in our data, an improvement in organic seed sourcing. And if 7 you look at this graph, again, this represents 8 vegetable acreage only, you also see that 9 acreage increases, organic seed usage decreases. 10 11 And this is very much in line with our 2016 12 findings. And it's important because we see that the largest producers are still using relatively 13 little organic seed. 14 And of course, this has a 15 big impact on overall organic acreage planted to organic seed. 16 17 also found that fewer producers 18 report that their certifiers are encouraging that 19 they take extra measures to source organic seed, 20 such as going beyond free seed catalogs, conducting variety trials, or at times even contracting 2.1 22 organic seed production ahead of the planting

What we found is a market decrease in 1 season. organic producers reporting that their certifier's 2 3 requesting that they take greater steps to source organic seed. 4 first published 5 we State of Organic Seed in 2011, more than 60 percent of 6 7 organic producers reported that their certifiers made these requests. Our most recent findings 8 9 show that 35 percent of organic producers report that these requests are being made. And this is 10 11 important because if we look at our data even more 12 closely, we see that for those producers who report that their certifies request that they take extra 13 14 steps to source organic seed, they respond 15 accordingly, and report that they increased their organic seed sourcing. And this was true across 16 17 crop types. 18 surprisingly, variety Not 19 unavailability remains the top reason for not 20 sourcing organic seed. More than 60 percent of respondents reported this as a significant factor. 21

We saw an increase this time around in our data

in producers reporting that a processor or buyer requirement served as a significant factor in not sourcing organic seed. This time, we saw percent of organic producers responding to our survey saying that this was a significant factor. We also found that fewer organic producers are saving and/or producing organic seed on their farm. In our last report more than 40 producers conducting percent of were these practices and this decreased to 25 percent of respondents who say that they're either saving or producing seed on their farm. We're encouraged that 40 percent of organic producers responding, say that they're interested in producing organic seed commercially. And this is important when we look at the fact that we need to grow the organic seed supply, we need to expand organic production here in the United States, and we need more skilled organic seed producers. So with training and adequate support, we hope that some of these producers within that 40 percent category can integrate organic seed production into their

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operations, and in so doing expand the diversity of organic seed available and help fulfill organic seed supply gaps.

> in 2016, organic Much like we saw producers understand that organic seed is important to organic integrity. Specifically, the vast majority of respondents believe that organic seed is important to the integrity of organic food, and that varieties bred for organic production will support their success, and that of the broader organic seed industry. Again, this was very much in line with our last report.

> I'm going to shift over to our certifier survey and give you a snapshot of these findings as well. In 2020, we conducted a survey of accredited certified agencies and 22 of them responded. Collectively, we estimate that these certifiers represent more than 80 percent of certified organic farms in the United States. A few findings here include that only 16 percent of certifiers believe that organic producers are going beyond free catalogs or sources to find

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organic seed. In the words of one certifier, they said, We need to constantly reinforce that the grower needs to do more work to locate or trial organic seed.

We also found that more than half the certifiers responding would like to see more certifier and inspector trainings, that it would be useful to their efforts. Eighty percent would like to see more educational materials and outreach to organic producers, especially in the way of organic seed availability. Eighty-four percent said that access to organic variety trial data is useful.

I want to point out here that a number of certifiers identified the need for comprehensive organic seed database. A number of these certifiers noted this in the comments of the survey without really even being prompted, and this stood out to us as an ongoing need for the organic We also found that our certifier community. surveyed data backed up a trend that we saw -- or a finding, I should say, from our organic producer

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survey, where certifiers also reported that they perceived processor and buyer agreements with contracted organic growers to increasingly be serving as a barrier to sourcing organic seed.

I'm not going to go too deep unto our research investment data. Again, we collected a ton of data on public investments going toward organic plant breeding and other organic seed initiatives. We totaled these investments over the last five years alone to be about \$40 million, which is very exciting. This is the largest investment we've seen that we've documented over a five-year span. Much of this funding, not coming from surprisingly, is USDA's Research and Extension Initiative's competitive grant program, the OREI program. We are enjoying more dollars in that program thanks to the last farm bill.

I also want to take this moment to acknowledge that the State of Organic Seed report would not have been possible without the support of an OREI grant that was awarded to both Organic

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1	Farming Research Foundation and Organic Seed
2	Alliance, so that we collect this data and publish
3	our respective reports. So I'm excited that Mat
4	is here with us today from USDA, NIFA, and I just
5	want to thank NIFA for publicly for the support.
6	Again, the SOS report would not have been possible
7	without this competitive grant program.
8	This report also wouldn't have been
9	possible without the support of well, let me
10	say this way. We were able to go well beyond the
11	scope of our previous reports and collect much more
12	data because of the support of a SARE grant as well,
13	which was awarded to a PhD candidate, Liza Wood
14	at UC Davis who is also a co-author this report.
15	And I'm sharing this to not only publicly
16	acknowledge the importance of the support, but also
17	to underscore how important these competitive
18	grant programs that fund organic research truly
19	is to supporting the ongoing growth and success
20	of organic seed systems here in the US.
21	This data, along with data from a number
22	of our surveys, are available for the first time

to the public through an interactive website. 1 Jared, maybe you could pop that link into the chat 2 3 You can search our specific surveys by and a number of other 4 region, by crop type, And we're really excited to be able 5 categories. to make this wealth of knowledge, this wealth of 6 data much more accessible and searchable to the 7 organic community this time around. 8 So please 9 check it out.

> So here's the takeaway. We are thrilled to be celebrating the 20th anniversary of the National Organic Program. In the last two decades we have seen tremendous growth in the organic seed supply. We've seen increases in organic plant breeding and research funding. We've seen more resources and trainings to support organic certifiers in their role in enforcing the organic seed requirement. We've also seen a growing understanding, especially among organic producers themselves, an understanding of organic seed is important, especially to the integrity of the organic label.

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And yet our data over the course of these years also shows no meaningful improvement organic seed sourcing in the absence regulatory changes. So I'm going to guickly wrap up by just highlighting a few recommendations as they pertain to regulators and certifiers. much is changing on its own as organic certifier's shared in our survey. So there may need to be a change in the regulations to move the issue forward. And we couldn't agree more. I was very happy to hear Dr. Tucker share yesterday that the NOP will be re-evaluating organic seed as a rule making priority given the outpouring of public support to make it a priority.

organic seed as a rule making priority given the outpouring of public support to make it a priority.

I think this really underscores that the organic community understands well that organic begins with the foundation of organic seed. So this is a top priority for us, that the organic seed regulations should be strengthened per the 2018 NOSB recommendation. We also strongly support the 2019 recommendation from the NOSB to strengthen the organic seed guidance document.

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And as our data showed we believe it's time for the NOSB and NOP to revisit and perhaps get creative on ways to hold organic buyers and processors more accountable to the organic seed We know this is more difficult for regulation. buyers and processors who aren't certified organic handlers. But many of these contracted buyers have their hands tied, and we need to ensure that buyers and processors are part of the solution to increasing organic seed usage across the board. finally, I And as mentioned, comprehensive organic seed database is still desperately wanted and needed. And finally, ongoing investments in certifier, inspector, and producer trainings, as well as outreach would also, of course, support more consistent enforcement of the organic seed regulation and support increased sourcing of organic seed. We were thrilled to support the development of the NOP's course on organic seed searches for the Integrity Learning Accredited Certifiers Center, the ACA, the

Association as -- create best practices.

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And

1	we're trying to do our part by developing resources
2	to help organic growers conduct organic variety
3	trials and meet that organic seed regulation.
4	So with that, I'm going to open it up
5	for questions. Thank you so much.
6	MR. POWELL-PALM: Thank you so much for
7	your presentation, Kiki, and your taking the time
8	to be with us today.
9	We have a question from Javier.
10	MR. ZAMORA: Hi, Kiki. Thank you.
11	Thank you so much for such a beautiful
12	presentation, and very informative. Something
13	that I dearly know because I live it every year.
14	I mean, every time my certifier shows up and says,
15	how do you go about searching for new organic seeds?
16	And I always say, you know, three, four companies
17	that I go with because but they don't because
18	they that's what I have around.
19	And you mentioned a bunch of things that
20	are really, really serious issue in the organic
21	community. Number one, you said that the last 15
22	years the usage of organic seed has stayed level,

1	but the amount producers that are growing organic
2	food has increased I don't know how many times.
3	So we have to think of numbers, numbers. Now,
4	you said that there were that \$40 million were
5	invested in research for seed to produce organic
6	seeds. What seeds are we is that a research
7	going to?
8	Because organic producers, we have a
9	really difficult issue finding organic seeds. And
10	I can count with my fingers for a little larger
11	scale I'm a mid-size grower, that I can find
12	seeds in the amount that I need. Every single year
13	I have issues. Last year it was green beans, and
14	winter squash, we didn't have any. The year before
15	was also, I guess it was delicata. But anyway,
16	so I really believe that, yes, this Board needs
17	to look into that just because the amount of organic
18	crops has grown exponentially, but the amount of
19	seed doesn't reflect that. Thank you.
20	MS. HUBBARD: Yes, Javier. Just
21	quickly answer one of your questions. Of the
22	research investments that we documented, that

40 million, about 80 percent of 1 investments are going toward projects focused on 2 3 organic plant breeding and/or organic variety So helping to collect data -- performance 4 data on how organic varieties perform against 5 6 conventional or equivalent varieties is 7 example.

> In terms of understanding how much organic seed is out there, we know that you organic seed supply has grown since the program was implemented 20 years ago, simply by looking at the number of organic seed suppliers and the organic seed offerings, based on the data we collect from organic producers' perspectives, as well organic certifiers' perspectives on how marketplace has changed. But we desperately need a comprehensive listing of certified organic seed that's available and that's out there. We don't have that, and that will continue to be a barrier, I think, to making quicker progress on growing organic seed systems generally.

MR. POWELL-PALM: Logan has a

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2	MS. PETREY: Thank you. Thank you,
3	Kiki, for the presentation. And so this really
4	isn't supposed to be a reason, you know, to look
5	or not look for organic seed, but the financials
6	of organic seed, I think, is important for farmers.
7	And maybe the incentive of looking even harder
8	and searching harder and all that, is that looked
9	at in the research of, you know, at least trying
10	to level that playing field. I mean, it obviously,
11	is going to cost more, you know, to produce organic
12	seed with potentially lower yields, you know. So
13	I would imagine it is going to be a hurdle on that.
14	But I can imagine that for farmers, you
15	know, if they do the following procedures their
16	the incentive is, you know, stop there, than
17	going after just so they can pay more for
18	potentially a lesser producing variety or
19	something. So, you know, in the grand scheme of
20	things, it really can affect the farmer, looking
21	at that side.

MS. HUBBARD: It absolute can, Logan.

1	Thanks for your question. And of course, organic
2	seed isn't always lower yielding, you know, as
3	conventional seed, as I think you implied, which
4	is one of the reasons why this these research
5	investments are so important in terms of
6	performance data and breeding to adapt these crop
7	genetics to organic farming systems. In our 2016
8	report we did provide a snapshot of the price
9	differences between conventional and organic seed.
10	It widely varied. It was far from consistent.
11	We know that it's more costly to produce
12	organic seed. And this is well, let me also
13	say that we do ask about price being a factor in
14	our survey of organic farmers, even though it's
15	not an allowable reason, as we know. My
16	understanding, and Jared correct me if you want
17	to in the chat box, is that this is less of a factor
18	than it used to be the price of seed. And as
19	we expand our capacity of organic seed production
20	and offerings, I do believe that price point will
21	come down

One challenge, of course, in growing

the organic seed supply is that these organic suppliers, these companies who at times have their own organic plant breeding programs, they are taking a financial risk to produce a product that isn't required fully to be used, given the non -given the exemption to use nonorganic seed. unfortunately what we're seeing as we document a lack of progress in organic seed sourcing among organic producers, is that we're actually seeing some of these organic plant breeding and seed production programs closing. Because it's no longer financially feasible for them to continue to take that risk. And they are losing hope that there will be changes in organic seed usage among organic growers.

And so we are in -- we're at a critical juncture, in my view, to make sure that we are moving number of solutions forward а simultaneously. And again, as I said before, I think mandating continuous improvement in the form of regulation will go a long way to provide production confidence to the organic seed

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companies that we're committed as a community to 1 2 supporting organic growers and enforcing the 3 organic seed requirement. And when I was MS. PETREY: Thank you. 4 stating yield, I didn't mean that a -- on the 5 farmer's side, I meant on the seed person's side. 6 7 I can imagine that there's barriers producing that yield the same as conventional seed yield methods. 8 9 MS. HUBBARD: Yes. Actually I want to respond to that just quickly, in that only 5 percent 10 11 of these research dollars have gone toward research 12 projects that support our understanding organic seed production, meaning addressing challenges 13 organic seed producers face in being successful 14 with those seed crops. And so our in-depth survey 15 this time around will hopefully inform future 16 17 competitive grant programs in this 18 Because we are doing a pretty darn good job of funding organic plant breeding projects. 19 Of course, there's more interest than we have money 20 for even those projects. But we really need to 2.1 22 turn more attention toward the needs of organic

1	seed producers because they face a number of
2	challenges, both production challenges, as well
3	as non-production challenges, that could certainly
4	be addressed through research.
5	MS. PETREY: Thank you.
6	MS. HUBBARD: Yes.
7	MR. POWELL-PALM: Wood has a question
8	for you?
9	MR. TURNER: Great presentation, Kiki.
10	Thanks so much for being with us today. You know,
11	every slide you presented, I felt like, boy, I wish
12	we had more time because every slide I sort of have
13	a root cause question, like, why is that, why is
14	that. Like, there's five whys every time I saw
15	one of your slides. And so I want to ask you all
16	those questions if we can have a different
17	conversation another time.
18	But I'm curious about whether any of
19	the research is going into what I would say is sort
20	of capacity building in the grower community. I'm
21	really surprised that there's not more seed saving
22	happening in among our organic growers. And

it goes a little bit to Logan's question -- I'm 1 2 so bold, it may be unrelated in her mind, but I 3 -- to me the cost to growers to buy seed year over year would sort of -- well, to me would suggest 4 that there's a better investment to be made on the 5 growers' side and really understanding how to 6 7 collect seed, how to manage seed, how to deal with that kind of continued propagation. 8 9 And maybe I'm just completely out in left field on his question, but I'm curious. 10 11 was surprised -- I'm surprised to think that we're 12 still functioning in -- we have to function in an expensive market for growers for seed. 13 that's part of the problem versus better management 14 15 of seed and building capacity, even for small -smaller growers even to understand how to collect 16 17 seed and manage seed and sort of keep it in 18 circulation. So I'm wondering if you could speak 19 to that at all? 20 MS. **HUBBARD:** Yes. That's great question, Wood, and it's a nice follow up from my 2.1 22 previous answer where the challenges reported by

organic seed producers -- these are also producers 1 who have their own small to mid-scale enterprises 2 3 of their own, seed companies, and capacity rose I mean, many of these producers want 4 to the top. to scale up but they don't have the capital or 5 They don't have data on 6 appropriate equipment. what the yields will be for particular seed crops 7 so that they can plan accordingly, economically. 8 9 Organic Seed Alliance has done a number of trainings and provided a number of resources 10 to support these growers in a number of ways, but 11 12 we need an influx of investments, in my view, to build the capacity that you just articulated. 13 It's desired, it's needed, and we have so far only 14 essentially supported that capacity building 15 through smaller grants, which truly have been 16 In fact, at times those smaller grants 17 helpful. are what a lot of these seed producers want and 18 need simply to purchase a piece of equipment to 19 help them clean their seed. So I don't know if 20 that's a adequate answer, but there -- this is 2.1 discussed more fully in the report, so I encourage 22

1	you to check it out.
2	MR. POWELL-PALM: Please go ahead,
3	Amy.
4	MS. BRUCH: Yes. Sure. Thank you,
5	Nate.
6	Kiki, thank you so much for your
7	presentation. I just wanted to let you know. I
8	actually I'm an organic seed producer and I'd love
9	to have some additional conversations with you.
10	But I grow seedcorn, and how that worked is, I
11	just had a lot of conversations with some of the
12	seedcorn companies and said, hey, I have an ability
13	to produce organic seedcorn for you. So it is a
14	lot more management, however and I think that's
15	the conversation farmers really need to have, is
16	there needs to be an agreement in terms of
17	contractual, to minimize some of the risks that
18	a farmer takes on to produce these seeds, and really
19	have that negotiation take place.
20	But as a farmer point of view, it's an
21	additional revenue stream that's a little bit more
22	insulated, and can be more insulated, than the

normal production outlets that we have for our crop. So it really can be a win-win, but it does kind of start with a conversation. And corn is different because that needs be to pollinated, female and male seeds need to be planted. However, some of the other crops that really Wood was indicating, you know, saving seed, in the Midwest. we're doing this Organic producers are doing it more informally just because I do believe that price is a problem.

I mean, you might not think the retail price looks too much different than the conventional price. However, when you look at something that could be re-used again, let's take, for instance, wheat or oats, the value of those products when we take them to market are pretty low compared to what I would need to turn around and buy them on the shelf for seed. We're talking maybe four, five, six times different. So that price is crazy because it's kind of like the saying that farmers, you know, they purchase retail and sell in wholesale and pay the freight both ways.

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You know, there's an opportunity really here for a farmer to have some additional revenue 2 3 streams to really optimize their input cost just by, you know, internalizing some of the cleaning. 4 The cleaning should not add four to five times 5 6 extra on these seeds that are just being re-run 7 by industry. So I really think this is a huge opportunity and I do think it starts with industry 8 Us farmers, we're raring to go to be able 9 to circulate more seeds in this environment for 10 11 our fellow farmers. 12 MS. HUBBARD: Thanks for sharing that, I would love to chat with you again at another 13 Amy. but bravo for being engaged in organic 14 15 seedcorn production. I agree that it can help the price point and can provide that added income to 16 especially diversified operations. 17 We recently 18 published an economic tool kit for seed producers 19 if anyone's interested in learning more about the 20 economics of seed production and how that might So I'll just slide back 2.1 work on your farm. 22 quickly. Thank you.

Thank you, Kiki. 1 MS. BRUCH: 2 MR. POWELL-PALM: Thank you, Amy. 3 Allison, please go ahead. MS. JOHNSON: Thank you so much, Kiki, 4 and for the additional information in the chat too. 5 This is such a service to the sector and it is 6 really helpful for making our discussion more 7 concrete, I think. The piece that I found most 8 surprising is that buyers are playing such a big 9 role in driving seed decisions, and as we're 10 11 here my wheels are spinning talking around, 12 consolidation in seed and inputs and now, like, how do buyers fit into that? 13 So I'm curious if you have any more information about who or what 14 15 types of buyers are setting these requirements for And, you know, the most nefarious 16 producers. 17 scenario that comes to mind is a buyer knowing that 18 a variety is produced only conventionally and could 19 never be found organically, and selecting it for 20 that reason to keep costs down, or because of some sort of relationship with a supplier of seed and 2.1 22 inputs. So I'm curious if you have any more kind of granularity or information to shed on that piece.

MS. HUBBARD: A great question. Thank you so much, Allison. We don't collect names of buyers or processors. I'll say that first and foremost. My understanding is that -- how this works, is that the buyer or processor is dictating that a variety be sourced. And too often that variety isn't available in a certified organic form. And oftentimes quantity is an issue because it's often these larger scale producers who are under contract with these buyers. And other times they are providing the seed directly to their growers.

Now, I believe that there could generally just not be an appropriate variety available in a certified organic form. However, the process shouldn't start -- stop there. There is an opportunity for these companies, for these buyers and processors, to contract organic seed production well in advance of planting season, and contract that directly with organic seed producing

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Τ	companies that can offer that variety in a
2	certified organic form, or can demonstrate an
3	equivalent variety that will do just as well, if
4	not better. And so, yes, I just want to underscore
5	your question on this point that I think this is
6	a real opportunity for making more progress in
7	increasing the amount of organic seed that is
8	planted to organic acres. I hope that's helpful.
9	MS. JOHNSON: Yes. Thank you.
10	MR. POWELL-PALM: Thank you for the
11	question, Allison.
12	Kyla, please go ahead.
13	MS. SMITH: Kiki, thank you for the
14	presentation. I know we've oh, sorry. I want
15	to put my hand down, and then I put it back up.
16	I know we've talked seed many times over
17	the years. So again, I appreciate the continuing
18	conversation. I have a couple of questions and
19	comments, so hopefully I don't go too long. But
20	number one, I just wanted to say that the additional
21	resources with the ACA best practices and the
22	training session in the learning center are super

helpful for certifiers. And hopefully they allow certifiers to gain more confidence in making compliance related decisions. So I -- you know, more tools is good for sure, and those I -- you know, I believe the learning center course is, like, sort of newish. So anyway, hopefully more people are watching that and find it helpful.

I think that for certifiers to, like -- just with the evolution of certification that sometimes we really come up with a data management and data -- like Jenny was talking about, data harmonization problem, and so a lot of this data, like, lives in, like, paper OSPs. And, like, over the years, like, we are -- certifiers are, like, getting more into technology and databases where, like, we will be better equipped to track seed usage So I know that, like, that's been a over time. struggle that PCO has had is, like, oh, we want all this data, and certifiers have all this data, and it's just a matter of getting it off of paper and into something else that is recordable, and trackable, and something that we can monitor.

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1	it's not something that is not possible, it's just,
2	you know, it takes time.
3	Sorry. These are just some comments.
4	I promise I have some questions.
5	You mentioned that about really wanting
6	a or a, you know, people are talking about a
7	comprehensive list of seed certified organic
8	seed. And so I'm wondering that, you know, we have
9	the Organic Integrity Database, and so it doesn't
10	seem like that's currently an effective tool. But
11	could it be, like, is there does it just need
12	to be updated more frequently, or is there is
13	it is there stuff is there a certain data
14	that's missing from there that doesn't make it
15	effective? Could that be a place where we could
16	capture organic seed?
17	MS. HUBBARD: You're talking about the
18	Organic Integrity like, the USDA's, right?
19	MS. SMITH: Yes.
20	MS. HUBBARD: Get it. So would that
21	database provide, though, specific varieties that
22	are available? Are you thinking about the fact

just that it documents organic seed producers? 1 I guess I'm a little confused as to what you 2 3 perceive it to already provide to certifiers. MS. SMITH: Yes. I mean, it does list 4 5 certified organic operations and the products, or crops that they produce. And so if someone is 6 7 producing, you know, Amy produces seedcorn, right? So, like, on her products list it should say 8 I don't know. I think it's -- I think 9 seedcorn. this is part of something where maybe there is some 10 11 additional, you know, data harmonization, in that 12 certifiers don't all use taxonomies in the same 13 way. And so maybe -- anyway. And so I don't know. Maybe it's not an effective place, but maybe it 14 15 could be if we included varieties, for example, or, you know, things like that. 16 17 MS. HUBBARD: Absolutely. There's 18 certainly potential for that, Kyla. And now, you 19 know, you're getting my brain churning here. 20 first say that there could be improvements in the documentation of seed crops. 2.1 There could be 22 changes in that regard that would help

organizations like ours in collecting data to begin 1 It was difficult to know, when we did an 2 with. 3 organic seed producer survey, who really was a seed producer. So I'm just going to, like, name that 4 and put it on the shelf over there. 5 if 6 But certainly, there's an 7 opportunity to collaborate with the Program on providing some type of a list using existing data 8 and then expanding off of it, I think that would 9 10 be huge. And maybe that's one next step that's 11 worth exploring. Unfortunately, the current 12 listing databases that exist have not proven to be reliable in the way of consistently being 13 updated, and we need a reliable tool. And so I'll 14 just stop there and say, I would love to explore 15 16 that. 17 MS. SMITH: I mean, I think that that 18 will be an ongoing and continued problem with OID 19 And I know that, like, you know, that as well. 20 is something that the Program is constantly, like, working on with certifiers is more data reporting. 2.1

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additional requirements when SOE comes out. So maybe this will exert towards, you know, more

I have one more question if that's okay,

5 Nate.

frequent updating.

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6 MR. POWELL-PALM: Please go ahead.

7 Yes.

My other question is, in MS. SMITH: the learning center course, there was a suggestion where -- because oftentimes, you know, a grower will -- our experience will be, that a grower will be, like, I requested organic seed, and then it showed up and it wasn't organic, right? there was, like, the suggestion, well just, like, order earlier. But if everybody just orders earlier then someone's going to be left without organic seed, right? And so I don't know if it's just, like, better communication or something between the seed supplier to be like, hey, we don't have that, like, look elsewhere, so that they know So maybe it's, like, earlier on plus earlier on. better communication or something. I don't know.

1	<pre>I'm just was trying to, like, follow that, like,</pre>
2	thread when I watched that course. And I was
3	having trouble about, like, well, I don't know if
4	that's effective all the time.
5	MS. HUBBARD: Yes. I agree with you
6	with what you just said. To that point though,
7	I think we could find some ways to create feedback
8	loops so that organic companies and organic
9	producers more broadly, know what the organic seed
10	supply gaps are. And you know, create a system,
11	again, for to improve that communication and
12	identify the needs. We hear from organic seed
13	companies who say, hey, should we just send our
14	list to the certifiers so they know that we're here,
15	that we have these varieties? And so they are
16	and then, they also communicate, we could produce
17	this organically but we don't know if we should.
18	And so there is this hunger for those
19	communication channels and for those feedback
20	loops. So we should definitely explore those as
21	part of the solution.

Yes.

SMITH:

MS.

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Send the list.

2	we have a guidance sheet that's like, hey, you
3	didn't, you know, do your seed search adequately,
4	or enough, whatever whatever the violation is,
5	and we have a list that we've sort of put together
6	of seed companies. But, you know, keeping that
7	updated all the time is challenging, and so I do
8	think, yes, being able to provide that out would
9	be helpful. So, yes, send the list.
LO	MS. HUBBARD: Thanks, Kyla.
L1	MR. POWELL-PALM: Dilip, please go
L2	ahead.
L3	MR. NANDWANI: Hello, Kiki. This is
L 4	Dilip. I'm a new board member, so just bear with
L5	me.
L 6	MS. HUBBARD: Welcome.
L7	MR. NANDWANI: Thank you. Just a
L 8	quick comment and a simple question follow-up from
L 9	my fellow board members they have asked you. So
20	first, I'd like to say that it's a nicely presented,
21	a lot of good information in your presentation.
22	And also I wanted to say that my students, they

Because when we issue non-compliances, we issue

1 have attended your OSA conferences since 2015 from

2 Tennessee State University if you recall it in 2016

3 and 17.

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4 MS. HUBBARD: Great.

MR. NANDWANI: Okay. So my quick comment is that, you know, correct me if I'm wrong, the organic seeds availability since 2001 -- I believe that organic seeds rule came in 2002 or around that time. And from that, almost 20 -- a little bit over 20 years, I would say at least 20 years, organic seed wealth has come long way. Because at that time there were barely any organic seeds were available and maybe not at all, or maybe fewer crops. And in 20 years we have organic seeds in, I don't know exactly, but a lot of, like, vegetables, fruits, and medicinals, and almost all crops -- if I say correctly, but there is still a lot work needs to be done. But in 20 years OSA and other organic seed companies and researchers the work they have done, I really like to applaud The organic producers, they are in much, that. much good shape now and better place. That's just

1 my initial comment.

My fairly simple question like Wood and 2 3 Amy, they asked you about the seed saving, you know -- the issue. So my question is that if -- or you 4 or maybe other, they may have answers for this 5 6 question. The organic seeds if they plant -- or 7 our producers, if they plant and to save seeds; the next generation seeds, do you think will 8 produce the same results, like, in terms of yield, 9 10 vigor, growth, or maybe resistance to insect pests 11 and diseases because these seeds are hybrid or open 12 pollinated? So I don't know if you have done any 13 research, any reports you have, or from any other seed companies, or anyone has done, you know. 14 that's all. Thank you. 15 Yes. 16 MS. HUBBARD: I mean, maybe as you were starting to say, Dilip, if it's a hybrid, 17 18 probably not. It's not going to grow true to type 19 again, unless it's open pollinated. There -- so 20 that's my quick answer. And Jared, our cagey plant

breeder can weigh into in the chat box. I -- it's

important to note though, as you you probably know,

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growing seed takes a different knowledge base and skill set, than growing, you know, just a food crop -- an edible crop. And so we have -- there's a lot of education and training needed to support organic producers who are interested in doing more seed saving, and organic seed production because it's often not as simple as just saving that seed. There's a lot of decision-making and selection that often goes into it, at least for certain crop types. And so this is an opportunity, and again, a real need.

I would also be remiss in not mentioning that there's also the challenge to supporting organic producers to be more independent with organic seed supply, in the way of intellectual property rights that too often restricts seed saving, or production, or even research. And so that's another challenge that organic producers face. I will quickly flag that we're going to be publishing a resource on intellectual property rights for organic seed producers and independent plant breeders later this year to help them

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understand the nuances of 1 those issues and concerns, and provide more guidance so that it 2 doesn't serve as a barrier. 3 Thank you. MR. POWELL-PALM: 4 5 Great question, Dilip. I have a couple of questions. 6 I'm going to try to keep it brief and then hand it back 7 to Amy. 8 9 When we say organic seed production or 10 seed development, I think there are -- there seems 11 to be kind of two things in one bucket here. 12 an organic seed producer as well. I produce organic certified yellow pea seed, certified seed 13 that is also certified organic, and flax seed. 14 And it's very easy. I get conventional registered 15 I grow it out as organic. It goes into the 16 marketplace as certified organic certified seed. 17 18 In looking at that, I think that seems to be something that you're sort of hinting at, 19 Kiki, is that supporting that, just the expansion 20 of production of certified organic certified seed 2.1

is one bucket, and something that we can expand

upon an offer resources to. The other side of actually developing seed under organic plant breeding methods, I guess, could you talk a little bit about the difference between those two, and where you think we should be really focusing our time and resources on advocating for, because they seem to somewhat different.

> MS. HUBBARD: Great articulation of the difference, Nate. Like you're saying, we need both and in between the organic plant breeding investments and taking conventional seed and producing it organically, as well as certified seed, that's where the important role of variety trials and ongoing and additional research plays in to identify which crops will do well in an organic operation under organic conditions and in what region. Sometimes you can simply find a conventional variety that immediately seems to perform just as well in organic as a conventional But there is growing research that shows system. that often times that's not the case.

> > And so that's why that research to

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identify which varieties are even worth growing out under organic production systems. And if they're not optimal in organic production systems, would it be easy to select for certain traits and adapt them to those systems? What would that crop improvement project look like? What would it cost? And then the organic plant breeding projects, ideally, are not only helping us to identify which of those varieties do well under organic conditions, but also, actually doing plant breeding projects, developing new varieties that will do especially well under organic conditions. So while we need them all -- we need them all and they're all important and they all fit together to some extent. And yes, again, we are so thrilled to see more investments from OREI and other programs in this type of research. But we certainly need more, especially when you see how those organic research investments pale in comparison to the research investments going toward conventional

agriculture research and projects that

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2	research	going to	ward or	ganic p	product	cion s	ystems
3	also bene	efits conv	ventiona	al grow	ers.	So I'l	l just
4	stop the	re.					

5 MR. POWELL-PALM: Thank you. That's 6 really helpful, I appreciate that.

Amy, please go ahead.

Thank you, Kiki, again. MS. BRUCH: Just one question/comment. Question would be, when you are -- when these tests are being conducted, looking at organic production, on these seeds and their fit, is the condition of the soil and the -- just the balance of nutrients, is that one of the attributes that's being considered? Because I do know in a lot of conventional testing when they're doing these seed trials it's, this one performs, this one doesn't, and the rest of the story with a deficiency in the soil maybe isn't necessarily brought to light. And that, as an organic producer, I'm always trying to promote, you know, that it's our ability to grow, manage our soil, manage below ground is then what is

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1 evident above ground. And for me in my operation,

I haven't necessarily found that seed is a limiting

factor to my yields. It's -- there is this --

4 another deficiency that I have to address. So I

5 was just, kind of, wondering how the testing works

6 with just soil identification.

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MS. HUBBARD: Yes. I can't speak to all the projects in our data set on that specific point, Amy, but what I can say is that I'm familiar with a number of organic plant breeding projects that are absolutely taking into account soil quality in their research decisions -- their selection decisions, the inputs they are providing soil, all in order to provide information to other researchers as well growers. But I guess I'll just stop there. is -- I just don't have a lot to go by and this isn't my wheelhouse. But absolutely, some of these plant breeders are looking not only at soil but interactions between quality. the soil microorganisms and the plants as part of their organic plant breeding goals. It's pretty

1	fascinating, and I'd be happy to follow up with
2	some specific projects if you'd like.
3	MS. BRUCH: Yes. Absolutely. Thank
4	you.
5	MR. POWELL-PALM: Thank you, Kiki.
6	Thank you for taking all of those questions. That
7	was wonderful. And I think
8	MS. HUBBARD: My pleasure.
9	MR. POWELL-PALM: As you can see, we're
L 0	very interested. So many thanks today. I'm sure
L1	our members have your contact information, so
L2	I'm sure we'll be following up with additional
L3	questions. But thank you for taking the time and
L 4	letting us run along with your time today. We
L 5	appreciate it.
L 6	MS. HUBBARD: Thank you so much. It
L7	was truly an honor. My pleasure. Have a good
L 8	meeting.
L 9	MR. POWELL-PALM: Thank you, and take
20	care.
21	Next up. We have Mat with NIFA. And
22	Carolyn, I think, is going to give an introduction.

1	MS. DIMITRI: Yes.
2	Welcome, Mat. I will say, Dilip
3	probably knows this, like, one of the happiest days
4	in your life is when Mat actually picks up the phone
5	and calls you because it means he is giving you
6	good news. So Dr. Mat
7	Oh, wait a minute. I'm practicing your
8	name 100 times. I'm sorry.
9	Ngouajio
10	I was doing it a lot better before I
11	was online. Sorry.
12	is the National Science Liaison for
13	Plant Systems and Organic Farming at the National
14	Institute of Food and Agriculture, also known NIFA.
15	Prior to this position he served as the national
16	program leader from 2013 to 2019 in the Institute
17	of Food Production and Sustainability, where he
18	administered competitive grant programs,
19	including the organic transitions and the Organic
20	Agriculture Research and Extension Initiative, the
21	O-R-E-I, and the Agriculture and Food Research
22	Initiative, AFRI. Prior to joining NIFA, he was

Τ	professor in the Department of Horticulture at
2	Michigan State University with a research and
3	extension appointment. He is a fellow of the
4	American Society for Horticultural Science and
5	past president of the American Society for
6	Horticultural Science. He represents NIFA
7	primarily regarding programs related to plant
8	systems, as well as organic farming. So in
9	addition to all of these amazing things that Mat
10	has done, he's also a wonderful colleague and
11	collaborator to those of us who have been working
12	in the field of organic research for many years.
13	So welcome, Mat. Nice to see you.
14	MR. NGOUAJIO: Thank you, Carolyn.
15	Thank you so much.
16	And thank you, Michelle, for giving me
17	the opportunity to present here today, and it is
18	always a pleasure to come here and give you this
19	update.
20	Now, like you said Caroline, I have
21	being serving at NIFA for the last three years now
22	since we moved to Kansas City as a national science

liaison, focusing more on plant systems, but more 1 importantly on organic farming, and that's why I 2 am here today. 3 So I will see if I can share my screen here with you and give you a little bit of 4 Before I get to that also, I would say 5 6 thanks to Kiki for an excellent presentation. 7 really enjoy it. And thank also for acknowledging support from NIFA for some of the work that we have 8 gone in the area of plant breeding. 9

Okay. Before I continue here, can you see my screen? Okay. I see. Perfect.

So we all know that we have made a lot of progress in term of advancing organic agriculture in the whole country. However, for us to sustain that type of investment, we need enough support from both the private sector and from government. And NIFA has had -- made some of -- seen some of the gaps and stimulate some cutting edge research to address some of the critical needs of the organic industry. But I just wanted also to let you know that most of our programs here at NIFA -- and thanks to the

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initiative of many of you, we have include a language on organic agriculture on most of our programs. So even if the program is not specific to organic, they do actually accept organic agriculture research projects. And these include both capacity and competitive programs.

But on top of that, we have these two specific programs uniquely designed to address the need of the organic industry. One is the Organic Transitions that we usually refer to that as the O-R-G program, and our largest program, which is the Organic Agriculture Research and Extension Initiative, O-R-E-I. So those two programs cover all type of production systems, all the way from open fields to indoor controlled environment. They cover both animal and plant systems and they support project that will span the entire supply chain. So this is one of those very few program that would cover everything that you can think off in the area of organic agriculture.

21 So just to show those two program. The 22 Organic Transition Program is our smallest

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1	program. This year, 2022, we are receiving \$7.5
2	million for that program. And the focus of that
3	is usually to address the need of those farmers
4	that are adopting, or that are transitioning from
5	conventional to organic production practices.
6	It's a small program, but also the eligibility to
7	submit proposal is limited to only colleges and
8	universities.
9	The second program which is the largest
10	one, OREI. This year we in 2022 we have 30
11	million for that program. And the main focus there
12	is to address the need of those people of those
13	farmers in the industry that have already adopted
14	the organic standards. And this is a very broad
15	program. Like we always say, pretty much any
16	citizen US citizen can apply for that program.
17	So very broad eligibility.
18	And we usually ask, you know, what are
19	the priorities of those two programs, and how do
20	you separate the two of them? And as you can see
21	on this graph, the two program kind of overlap
22	significantly when it comes to issues like

efficiency, when 1 production it comes to 2 profitability, and to competitiveness the industry. 3 organic Those two addressing those key issues. 4 However, to make 5 sure that those two program are separate enough, 6 again, for Congress to continue to give us support 7 for those two, rather than just killing one and keeping one, we try to keep some of the priorities 8 really separate. 9 For OREI we are focusing here on studies 10 11 that focus on on-farm. A lot of emphasis on OREI 12 is on on-farm studies. That is also where we are 13 funding anything related to educational tools, all the post-harvest, most of the research on seed and 14 15 IPM. We also include a curriculum breeding, development since the 2014 Farm Bill in this 16 specific program. 17 18 On the other side, when we looked at 19 the ORG, we tend to focus more on aspect like 20 ecosystems services, you know, on soil quality, pollinator biodiversity, carbon sequestration, 21 22 and all the work on modeling to better understand

the impact of organic production systems, we also 1 tend to fund those through the Organic Transitions. 2 3 And whenever we have any new National Organic priorities, 4 Program lets say а case antibiotics that were discontinued, or research 5 6 on things like methionine, we tend to also put those 7 in the organic transitions priorities. And if you look at our Request For Application, RFAs, you will 8 see more details there. And this is again, the 9 10 type project that we fund with those two program. 11 For OREI, that's the biggest program, 12 have three different types of integrated we 13 projects. Integrated project are those that include research as a requirement, plus education, 14 or extension, or all three component. 15 That's why we call integrated project. We have the Tier 1 16 project that can fund, you know, proposal up the 17 18 \$3 million a piece. The Tier 2 can fund up to 1.5, and Tier 3 project is up to 750,000. And we design 19 all those different type based on input from our 20 stakeholders. 2.1 You know, they wanted to see 22 smaller project for some of the institution that

competitive. 1 were not very Because when everything was just one type of project, the most 2 3 competitive institution tend to be the only one that were really successful. 4 We are -- since 2014, like I said, we 5 6 have also included а proposal type 7 curriculum development because the industry also told us that they wanted to see more education, 8 more students involved in organic agriculture. 9 10 And we have been very successful but not to the 11 point that we are happy. We would like to see more 12 proposals submitted under that category to develop 13 more new programs, certificate programs, or degree programs, focusing on organic agriculture. 14 15 this is one of the few program within NIFA where we continue to fund conference proposal, but more 16 17 importantly, planning grants. 18 So a conference like this one or any 19 other conference where people want to get together 20 talk organic agriculture, to about desian information with 21 priorities, share the or

industry, we can fund up to 50,000 which is pretty

good. And also, people can get together to start thinking about new ideas, forming teams and putting together proposals. So we can provide up to 50,000 for those planning grants.

And the Organic Transition, we only have one type of project which is the standard project for up to 750,000. That is a small program, so we didn't want to cut it into so many small pieces. And as you all know, we all know the issues that the organic industry is facing a lot and they span the entire supply chain. So to address those issues, we really need a true partnership to identify what the issues are or what the most pressing issues are. And the NOSB, we see you as our key partner.

We usually think of our partner in two groups, some that we call stakeholders and some that we call partners that we work with, you know, to address the need of our industry. So we look at NOSB as being a partner that we work together with to address those needs. And we also use a lot of the farming language there. We use the

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surveys like the one that Kiki was talking about. 1 Every listening session that is organized by any 2 3 of our partners or stakeholders, we use that -we take that into account. And what do we do with 4 5 that, is we listen to what our partners are telling 6 They help us in those issue identifications. 7 They help us set priorities, and they also help us work with both USDA and Congress. 8 And the benefit of that is, they have secure support for 9 this industry for funding for research, education, 10 11 and extension. 12 And we have also been very lucky because your work was also well received by Congress. 13 this industry has done over time since we started 14 15 with this program in 2004, Congress has really responded by really providing the support that NOSB 16 17 and any other partner has asked. And you look at, 18 starting next year, OREI alone, the budget will 19 go to above 50 million. So that's a big win for 20 the work that this industry has done. Also, what do we do when we receive that 2.1 22 type of support? So within NIFA, we listen to all

the input, we take all the input from industry and 1 we translate that into what we call the Request 2 3 For Applications. Then we make sure that we use a very strict panel review process to look at all 4 5 the applications that we receive for our programs. 6 And we only base our review on scientific merits. 7 That's what we use for the selection of the project that we fund. And after selection of those 8 projects, we also make sure we follow up with our 9 10 applicant to make sure they are delivering what 11 they promised to do. 12 Now, you will ask me if -- or every year you meet, you spend a lot of time, a lot of effort 13 developing your own priorities for NOSB, what do 14 we do with those priorities? I would just tell 15 you that NOSB priorities become our priorities. 16 So each year -- and thanks to Michelle and all 17 the folks that keep us in the loop, once they'll 18 get published, we take them and then they become 19 also our priority. We include them in our RFAs, 20 both the Organic Transitions and OREI program. 2.1 22 We have been doing that for the last couple of

years. And it would be very difficult to take your priorities and try to go and narrow them down to one or two. So what we do is we put a direct link to all those priorities in our RFAs. The couple of the first years, it wasn't very easy because everything that we do, we have to justify it through the review process of our RFAs specially with our policy folks. So today, they can accept to put those links in those RFAs directly.

Now, what are the implications? single dollar that is appropriated for organic research, we want to make sure that that money is spent on organic agriculture and it is spent on the most important issues of that industry. received a lot of projects where you can clearly that, you know, it was a tell conventional They just added the would organic just research. so that it could fit the program. So we want to make sure that all projects submitted to us are relevant to the industry. And how do we establish that relevance?

We establish that relevance by asking

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Τ	our applicant to clearly demonstrate that their
2	research is addressing key priorities of the
3	industry. So by having NOSB link priority
4	linked to our RFAs, they are used by our applicants
5	to establish that relevance to show that this is
6	really addressing a need of this industry. So I'm
7	just giving here an example of how our applicant
8	community is responding to those priorities. I've
9	put here in this box verbatim a language from one
10	of the applications, and this is an ongoing award.
11	And they put in their application right at the
12	beginning, This project addresses three NOSB
13	research priorities, and then they listed them:
14	Organic alternative systems; side-by-side trial
15	of organic materials and culture methods; and
16	three, production and yield area to transitioning
17	to organic production. So you see that the
18	applicant community is really taking that very
19	seriously and they are using that to establish that
20	relevance. And that is what pushed the project
21	really high on the list.

Now, we also have had some questions

priorities to put, like, number 1, number 2? would say even within NIFA, we usually do not rank our priorities because it would have no impact on And sometimes we ask our peer review system. people to -- we use bullets, which is a lot easier than just using a numerical system 1, 2, 3. our focus in our peer review panel is really, once the relevance is established, most of the focus is on scientific and technical merit of the proposals. So I'm just going to move here and show you a bit of data that those two programs have become quickly established as national programs. This shows the number of proposal received by And you can see pretty much we every state. received proposal from state everv territories. Obviously, you know, most of them

be ranking

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are focused in the north central, north east and

then the west coast, with Texas and Florida also

submitting a lot of proposal. And when I show you

the next graph, which is the number of proposal

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about,

should we

funded, it would show the exact same pattern.

And this have the number of proposals funded for this program. And the state in pink, and I would say North Dakota was last year -- they received an award last year, those are the state that have not yet received an award from us. And there are very few of them. I think last year, North -- in 2021, North Dakota received their first award, and Oklahoma also received their first awards. So very soon, pretty much every single state in the country will have received funding to do organic research.

And another question that we receive a lot is about the success rate of our two programs. They are pretty different between OREI here in blue, and ORG in green. Like I told you, OREI is open to everyone. That's probably the reason why the success rate tend to be smaller. It ranges here between 8 percent and about 30 percent in a good year. ORG, the Organic Transition on the other hand, tend to be higher in term of success rate. Like, just look at 2021 here. We have 61

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percent success rate for that program, and part
of it is because, again, not very few people are
eligible, only universities can apply. So there's
a lot that we can do to increase the number of
proposal there. But look at here, OREI, very low
as a success rate.

Now, a couple of dealer, also some good news is when I started at NIFA in 2013 we have a couple of issues at that time based on some of the surveys that were done nationally. One was, we needed to see more animal systems proposals. We wanted to see more proposal from small and minority serving institutions. And at that time there were very few projects funded in the south. And over time we have made significant increase in all those three bullets. We are seeing more proposal for animal system not only submitted, but also funded. thing for small and minority Same serving institution and in the southern region.

Kiki was talking about plant breeding.

Yes. The same thing was true here. We wanted
to see more seed and breed proposals. Look at this

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graph there. When I'm looking at the success rate, what you have there in green will be the success rate of the entire program. And then in blue will be the success rate of the seed and breed project.

2014 we have 23 percent for the seed project and the entire program was 27 percent. So the seed and breed project were not very successful with the program.

What we did was, again, we are only funding project based on scientific merit. We rely a lot on you and the industry to send the word We did a lot of craftsmanship seminars and we are very happy to see that since that time, all the breeding project are more successful with our Look at here, since 2015, all the programs. breeding project are more successful. And 2021, we have 44 percent success rate for the breeding project compared to 23 for the rest of the program. So that's another place where we noticed that there was a need and we've made a significant effort through you, through all our stakeholders, to really bring together the best mind so that they

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can put together compelling and competitive projects.

So some areas where the news is not that great is, we have just closed the 2022 grant cycle.

So all our applications are in for OREI and ORG.

For OREI, we saw a significant drop in the number of application, even though the total budget of the program has increased, we are seeing this year 40 percent drop in the total number of applications for OREI, and 50 percent drop in the total number of application for the Organic Transitions for the last two years.

Now, why? We were just scratching our head and asking, is this some side effects of COVID?

We also noticed that a lot of project director that have active awards were, all of them, asking for no-cost extension, meaning that they are struggling to complete their field work and they wanted extra time to get it done. Probably they did not have the time to put in -- together new applications. So this is something that we need -- we are going to be working on, making sure that

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as our budget increase significantly, that we work with our industry, our -- all our partners and stakeholder, to increase the number of applications because we went to make sure that we are only funding the best scientists.

So again, here you saw a budget of OREI increasing to 50 million. So we need to follow that with, you know, taking advantage of that to stimulate the research and innovation and to tackle some of the big issue that the industry is currently facing. And looking to the future, again, we are going to keep our three leg of the stool, you know, which is research and innovation; extension is the key component of our program; and education training of the next generation of research leader will also continue to be -- it's one -- it's our weakest leg right now, the education component, but we will try continue to work on that.

We will also continue to work with you all to promote the two programs. So if anyone has a meeting somewhere and wanted us to come and give a talk on the two programs to really stimulate the

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Ι	applicant community and get more solid
2	applications for this program, we would be ready
3	to come anytime. We want to also work within NIFA
4	to continue to include the language on organic
5	research in other programs. We also thought that
6	maybe we, that was the reason why we getting fewer
7	applications because most people can see other
8	opportunities with other program, like beginning
9	farmers. I manage another AFRI program where I
10	am funding many organic project. So we would
11	continue to do that.
12	And also we want to we are very
13	excited that we are being evaluated. Our program
14	is being evaluated by an external evaluator, the
15	Organic Farming Research Foundation, so that maybe
16	one or two years from now, they would come with
17	some findings, some ways we can all together
18	improve those two programs. So this is our entire
19	team. It is myself, Mat
20	Carolyn, you did a great job of
21	pronouncing my last name. Many of my colleagues
22	many of my colleagues have that problem.

NGOUAJIO: MR. So myself, Mat Ngouajio. 2 3 MS. DIMITRI: Thank you. MR. NGOUAJIO: Yes. I have -- look at 4 the plant part of the organic system. 5 6 overall lead for the program. But I do have my 7 colleague, Steve Smith, who is from the animal systems division. And we have Neerja, who's our 8 9 program specialist. Since organic touches on everything plant and animal, you also see there 10 11 too, division director, Susan Moser from plant 12 system and Bob Godfrey from animal systems. those are the two division director that I work 13 14 with for these organic programs. 15 So -- okay. Yes. We are asked to show this slide to show that 16 alwavs 17 nondiscrimination statement for USDA. I think 18 since you are going to have a copy of the slide, 19 I will not go through and read all this now. With 20 that, I think I will stop here and take any question that you may have. And I will also stop sharing 2.1 22 my screen. I'm coming back to you, Kyla. And I'm

1	happy I did all of this without having any problem
2	with my internet.
3	MS. DIMITRI: The internet guides
4	Gods are shining on you.
5	Nate, do you want to do the questioning
6	
7	MR. POWELL-PALM: Sure.
8	MR. NGOUAJIO: or do you want me to
9	go for it?
10	MR. POWELL-PALM: Thank you again, Dr.
11	Ngouajio. This was just fantastic. I know we're
12	going to bombard you with questions now. So buckle
13	up because this is really exciting to see all this.
14	We're going to start off with Wood.
15	Wood, please go ahead.
16	MR. TURNER: Thanks, Mat. Great
17	presentation. I really appreciate it. And I know
18	we've been you presented to us fairly recently
19	before and I know we're we continue to sort of
20	say, hey, come tell us more about how this process
21	is working and how the research priorities that
22	are coming out of our Board are, you know, really

coming to fruition or sort of making a difference. 1 And I think that's really on the minds of all of 2 3 us as a group to try to figure out how this process really works. Because I think in some ways, we 4 all come onto this Board and end up inheriting a 5 And that's certainly true of research 6 process. 7 priorities where we sort of, you know, produce these research priorities and they seem to be 8 rolling over year over year. 9 10 And the question has been coming up 11 among this group in particular, you know, what is 12 the impact? And so yeah, I think you did a great job of sort of explaining that. And I guess, one 13 thing that will be helpful for me to understand, 14 15 certainly as we're eating into our time to discuss our discussion document on research priorities 16 today -- with good reason because it was great to 17 18 have your presentation. 19 But the question I'm curious about is, 20 can we do a better job of articulating -- and I get the point about ranking the priorities and 21 you, but the 22 that's not useful to idea of

articulating what the priorities really are trying to get at. Because I think even there's confusion within the community sometimes about that. have a summary document, but then a much deeper document that articulates some of the things that are associated with it. And I just want to make sure that somehow the objective or the -- there's really clarity into what we're seeking to Because I think sometimes there's understand. some -- they can be fairly general, and I want to make sure that that's -- just get some guidance from you on that.

And the second point that I want to ask about ORG in particular -- and we hear a lot from the community about resources, improving resources to farmers who are trying to transition to organic.

And I hear when you talk about ORG and the fact that those grants only go to colleges and universities, it makes me worried that the folks who need them the most, the growers themselves, are actually too far removed from that college and university aspect of that -- of the grant to be

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able to really benefit from it.

And so I just -- I'm sort of imagining, 2 3 having read a lot of comments over the last several weeks, I'm just sort of imagining what's on the 4 minds of people who sort of wonder, like, how did 5 this -- and that's a small program, that's a very 6 small program compared to the other program. 7 how is that funding directly affecting those 8 Sorry for the long question, but I did 9 arowers? want to give you -- it's a lot of context, but sort 10 11 of having you here today, I appreciate it. 12 MR. NGOUAJIO: Thank you, Wood. Α 13 very good comment there for both ORG and your Let me began with the ORG program. 14 priorities. 15 To be honest, even us, when I first got to NIFA, I said, man, this is the Organic Transition. 16 we -- this is a program where we should be getting 17 18 more farmers involved. But then when you realize that Congress -- they throw our program out in 19 bucket,. Some of them -- every one comes with a 20 prescription, and the organic transition program, 2.1

just like many other programs that we have, the

1 IPM program and some other -- methyl bromide, my 2 other program, they come with a strict prescription 3 because they came under the umbrella of what they 4 call integrated project programs.

> And when they say integrated programs that you need research, education, Once -- who can offer those three extension. Only land-grant institutions. things? So even ARS cannot compete for that program. ARS cannot submit a project to Organic Transition. However, we have language, that came from the industry that this did want to see farmers involved in those projects. That is so important to us. we still required to either work with a field that is already certified, or that will be certified by the end of the study. Because we noticed also there were so many project funded with the Organic Transitions at the beginning of the program and then once the project was finished, everything was done.

So we are putting a requirement now,
that you need to certify that piece of land. And

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what's the best way to do it? Work with a farmer that at the end of the project that farmer would certify that piece of land. So it's still a weakness really, I would say, for our programs to not have people from industry like Kiki, the Organic Seed Alliance, many other farmer that can submit application directly. They have right now to go through a university. So if you want to compete for that program, you need to find a university and then be a SOP award for that university. And your budget should be less than 50 percent of the entire project. So that's an issue that you know, comes with -- we only need to change the law if we went to change that. that's a small weakness, but still, we are happy to have that program still in the books. Now, when it comes to priorities, I

Now, when it comes to priorities, I would say personally, I think the way you present them in term of giving a summary, and then followed by a more in-depth discussion of what you really intend to be achieved, that is still the best way to do it. One, we are facing a significant problem

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1	with this industry in term of researchers. We can
2	express those needs. We can say we want to see
3	more methodology in research. We want to see more
4	of soil health. But still we need the people
5	outside out there, the researcher, that are
6	specialized in those field, or that would be
7	attracted to engage in those field. And as we
8	speak right now we don't have the luxury of that
9	number. So to me, let's keep it broad. Whoever
10	we can grant, we will say thanks for that. Because
11	if we keep it too narrow, we will be again trying
12	to narrow a community that is already too small.
13	I don't know if I I've covered that, Wood.
14	Thank you.
15	MR. POWELL-PALM: Thank you. Next up
16	is going to be Amy.
17	MS. BRUCH: Thanks, Nate.
18	Thank you, Dr. Ngouajio. Very
19	interesting insights on research. I have a
20	question for you, just if you could provide some
21	additional information on that feed-back loop for
22	results. So you talked a lot about, you know, the

2	what, maybe, the focus is. I was just curious.
3	Status updates, how results are communicated, and
4	if somebody if an awardee does take up one of
5	the NOSB research priorities, is there a way for
6	any interaction between, maybe, our group
7	potentially and what that person is real-time
8	researching?
9	MR. NGOUAJIO: Okay. Thanks, Amy.
10	That's a great question about, you know, once the
11	research has been funded, you know, what's, how
12	do you close that loop, make sure that they stay
13	connected with the industry and those other people
14	working in that field. We were doing a lot of what
15	we call the project director's meeting where we'd
16	get all the people that are funded, get together
17	maybe once every year to share their research
18	results. But unfortunately, with two things, us
19	moving to Kansas City, and second, COVID, we have
20	not done any of those three things.
21	We lost so many of our staff, about 80
22	percent of our staff. And one of the things to

process for application, and who's applying, and

cut at that time was we no more project director
meeting, nothing else, just focus on the basics,
what we can do to get the money out of the door.
So we will do a little bit more of that now that
we are back fully staffed. And another thing that
also happened is, we most of our project are
funded as a grant. So meaning that the you have
that, what is called the minimum reporting
requirement. And we have to actually sometime
I'm rejecting more annual report than I used to
do, because you see people giving you five
sentences for a project of \$2 million because
that's all that the government requires, you know.
It's not like when you do a cooperative
agreement, you can ask for more. It's, like, not
the SARE program, when you get a project funded
through the SARE program because those are most
of them are cooperative agreement. They can ask
for extra reporting. But most of our grant, we
do not have that opportunity. So the best way for
us to get more is to get those project directors
together with industry to share their result and

1	usually when we convene those meetings, we get more
2	from those project directors.
3	But you are its a very important
4	point, Amy, because it's if the research is done
5	and the only output is waiting for a scientific
6	publication that most of that is not go into
7	go to the hands of the industry right away. It
8	may take five to ten years to get to that scientific
9	publication, when we actually need to have that
10	feedback on a continuous basis. So, thanks.
11	MS. BRUCH: Thank you.
12	MR. POWELL-PALM: Dilip, please go
13	ahead.
14	MR. NANDWANI: Okay. Good afternoon,
15	Dr. Ngouajio, and good to see you again over the
16	institute's connection. Although I have attended
17	your presentations in the past in American Society,
18	but this was really a very good update on what's
19	been happening past few yes, especially we are
20	getting out from the COVID. And as I noticed in
21	others that there was a drop in the applications
22	and that there is a increase in funding.

1	Couple of kind of one is quick simple
2	question and maybe a clarification. You know I'm
3	with TSU and it's a 1890 institution, and you did
4	mention that there are some within OREI and ORG,
5	you have some preference or where you do see
6	that proposals are coming from minority
7	institutions. But what other programs in AFRI
8	which you are also program leader, do you see there
9	is there any specific programs for those
LO	institutions? And part of that question is also,
L1	the research priorities you have mentioned from
L2	NOSB to in OREI, are they also the same when
L3	proposals being submitted in AFRI and other USDA
L 4	programs, or is there any update or changes in those
L5	research priorities?
L 6	And second quick question I have, these
L7	ORG proposals, can they be conducted on certified
L 8	organic operations? My understanding is that,
L 9	yes, but I'm not sure, or it has to be only the
20	transitional growers. Thank you.
21	MR. NGOUAJIO: Okay. And thanks,
22	Dilip. Thank you for seeing you again today, and

hopefully, we will I will you see you again	at
ASHS meeting. So well, for the ORG program,	we
really want most of the research to be done	in
certified organic facilities. And, like I sai	d,
it's based on the past. Many people, I mean,	I
was back in 2001 I was a postdoc. We receiv	ed
one of the first ORG projects back in 2001. The	re
were three funded that year out of four projec	ts
submitted. And our team received one, made	me
receive one. When you go back and look at all tho	se
projects, everything was shut down at t	he
completion of the funding. So and the indust	ry
told us, no, we cannot continue to give out mon	еу
and not get any results. We want to grow t	he
organic community. That is part of the reason w	hy
we are supporting funding for those programs.	
So that's why we put a requirement th	at
even if it's not certified organic at least te	11

that you are documenting everything so that you

can be certified by the end of the three years of

your project. So that is what we are doing now

because again if we just say certification is not

a requirement, I can guarantee you much of that research is going to be done in conventional system that would take a piece of land, just do the research. After three years, that would be done, they would move to something else. So it's -- it's kind of limiting the number of application that we can get. But we ask this thing to make sure that we are using organic money to support the organic industry. That is probably still the best way to proceed.

in term of priorities for our organic -- other program at AFRI I have an AFRI program that Ι manage. That is called Foundational Knowledge of Agricultural Production It's a new program that we started in Systems. And that is the program where we fund a lot of organic projects. Maybe because I was the one who have started that program I made sure that there was enough language there to allow for organic But I would say the priorities for AFRI research. are usually more broad. So if you're looking for an AFRI program don't -- check with the program

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1 managers to see that your ideas would fit.

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We tend to keep them really broad, because each time we try to narrow down things, we get so many people or communities that would come to NIFA and complain and say, why is this project focusing only on this topic? So to avoid all that, you will see it's true for many of our program, we keep the door wide open as much as we And that has been the message that I convey to the community. Don't look for the word organic in a program to know that you can compete in that And I will tell you, in that AFRI program. programs the success rate of organic programs, And we have even funded there is higher than OREI. conferences through that AFRI program.

So the key word there, if a program you see the type of research that is doing there could fit in what you are doing, just check with the program manager and you probably would be able to submit. And those program also offer an extra layer of flexibility that, Dilip, you know -- the organic industry told us because we really listen

closely to what NOSB say, or the Organic Seed
Alliance, they told us that they don't want to see
a bunch of research conducted with OREI money, or
organic transition money comparing organic and
conventional.

And indeed, when you look at the early projects, it was comparing organic tomatoes and convention tomato, comparing organic corn and conventional corn. Those were first project that were being funded. The industry told us, that doesn't advance our industry, showing us that organic doesn't yield as much us conventional We don't want to see that doesn't help us. anymore. So we don't fund those type of studies anymore within OREI. However, you can still, if you make a case, in other AFRI program, to do some sort of comparison studies. So it's a lot tougher within OREI. So those AFRI program have -- offer more flexibilities.

MR. NANDWANI: Thank you. You have answered very well and thoughtfully and I'll see in Chicago for ASHS. Thanks again.

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MR. NGOUAJIO: 1 Thanks. 2 MR. POWELL-PALM: Allison, please go 3 ahead. MS. JOHNSON: Thank you so much, Dr. 4 5 Ngouajio. This has been really interesting. 6 I appreciate how much time, it's clear, you're putting into thinking through fairness and making 7 the biggest impact investments with our limited 8 research dollars. I've been working for a number 9 10 years on the proposal for a comprehensive organic 11 transition program that would be particularly 12 aimed at supporting small and mid-sized producers, and that would bring together flexible resources 13 that could meet a wide range of needs, including 14 15 on-farm research. And part of our motivation in pursuing 16 this is trying to address concerns that I've heard 17 18 about it being complicated to figure out how to 19 access resources, each program having different requirements, it being time-consuming to apply, 20 2.1 and so on. And your observation about the dropping 22 application rates and some of the other related

programs that producers maybe using, made me wonder 1 about this participation issue. So I'm curious, 2 3 if you had the chance to design something new, how do you think we could make it easier for more 4 producers to access research funding and improve 5 coordination between ORG, OREI and some of the 6 7 other arms of USDA that support organic? MR. NGOUAJIO: That's a tough 8 Wow. one, that I -- if I had the same question, I would 9 10 be asking, you know, going back to the industry, 11 OFRS, Organic Seed Alliance and say, hey, guys, 12 help me here. How can we get this done? 13 But just to answer your question, I would think that if we went to get more grower 14 involved, it is just to continue to do some of what 15 we have heard from the industry in putting in our 16 RFA that requirement to make sure that each project 17 18 has a grower component to make it relevant and 19 adapted right away. And we have been doing that, and we are lucky that a lot of people that serve 20 on our panel, people like yourself, many of them, 2.1 22 they see that need, the need for getting not only

farmers, but industry folks that are working directly with those farmers involved in the research that we do. That will continue to be a requirement, and that is one -- to my knowledge and my experience just sitting in panel, it makes the project more competitive. There's no project that we fund in our program, if you don't have a grower component. It is really tough to go across that funding line for most of the projects that we fund.

So now, how can we better do that? I don't think the way the law is set right now, we can get to the point where we can replicate something like the SARE program where you have a farmers' component to it, where they can actually apply directly. That -- our programs and the legislation that comes with it don't allow that. That will be a good additional component to the program that we do, where we can have a grower component or competitive small program that they can come in. But right now, all we do is work with farmers -- and not only work with them, make sure

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they have a budget in the project. You know, if 1 you don't have -- they don't have a budget, it means 2 3 that they are just supporting the project, they So that's a big are not part of the project. 4 But it's a great question and is one 5 requirement. 6 that we need to work together as industry to find 7 the best way forward. So I'm not trying to avoid the questions, but I'm just saying that me sitting 8 9 here, it's -- the solution to that would come from all of us. 10 Thanks. 11 MR. POWELL-PALM: Thank you. 12 MS. JOHNSON: Thank you so much. 13 MR. POWELL-PALM: Thank you so much, 14 Dr. Ngouajio. This is an exceptional opportunity for us to better inform our work, writing and 15 thinking about research priorities. I think we've 16 been in a bit of a state trying to figure out how 17 18 can we be more effective at sending new priorities 19 that actually make it into grant making and are So we really appreciate your time. 20 useful to you. 2.1 I've gotten lot of clarity from this а 22 presentation. So very much appreciate you taking

1	the time again to sit with us today and share.
2	Very much appreciate it.
3	MR. NGOUAJIO: Thank you.
4	MR. POWELL-PALM: And with every good
5	discussion, comes a little bit of a time check.
6	So we're going to probably run a little bit late,
7	but I think those two presentations we had today
8	were just outstanding. And so I really appreciate
9	Kiki, as well as Dr
LO	And I'm going to try this real quick,
L1	Ngouajio Ngouajio. All right, Ngouajio.
L2	Dr. Ngouajio, thank you again, and
13	Kiki. Thank you.
L 4	So I we are going to turn it over
L5	to Wood. And we were just strategizing for how
L 6	to move through our the rest of our agenda today.
L7	And I think, Wood, does it still work if we run
L8	try to go through research priorities and
L 9	excluded methods and then defer our DTO discussion
20	to tomorrow during our deferred votes period?
21	MR. TURNER: It actually works for me.
22	I don't know if there's any I mean, we a

1	straw poll of the group to make sure that's okay
2	with everybody.
3	MR. POWELL-PALM: Is that okay with
4	folks? We all sit tight a little bit. All right.
5	Appreciate you all.
6	So, Wood, I will turn it over to you
7	for the material subcommittee.
8	MR. TURNER: Great. So like Nate
9	said, we're going to discuss two things today, the
10	discussion document on research priorities for
11	2022 and the proposal on excluded methods that
12	Mindee will present after that. And then we'll
13	move the discussion of distilled tall oil to
14	tomorrow.
15	So I this may not be something that
16	we need to I think it's important, and I think
17	we tried to set this up so that we could have this
18	discussion on the discussion doctrine and research
19	priorities right behind Mat's presentation.
20	We've had some of the discussion I think here today
21	already. And I don't want to go through, you know,
22	the entire discussion document ad nauseam. I

think we've gotten, you know, good feedback from
the community as a whole on some of these -- on
these priorities. And I think in general, what
we're hearing is good support for the priorities
again, which may not -- probably doesn't come as
a surprise to anyone.

I think we've noticed some folks from the community who are leaning particularly hard on certain topics that we know are important — that are of particular interest, including things like biodegradable mulch films, and the like. So I don't want to go through these in detail, but I did want to spend a couple of minutes just sort of raising a couple of points that I think are particularly useful.

One is that, I want to make sure the community is clear on the fact that -- and again, you may have heard me in my questions to Mat indicate that we produce an executive summary which is a list, an actual list of the very distilled down priorities that we've landed on. And then there's a supporting document, a longer document

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that sort of goes into more detail about what these are intended to do. And I just want to point out that there was some feedback from the community that we had somehow disregarded or dropped, a discussion of more research into copper under the crops subcommittee, and that's not the case.

We -- the summary of the -- under disease management didn't necessarily mention copper by name. But if you look at our actual discussion document, we go into some detail about what we're really looking for in trying to learn more about the copper-based materials and to how to think about decreasing those needs over time. So just want to make sure that was clear to folks.

I also wanted to point out, you know, I think some of the feedback that we've heard from community is, you know, I think we've had kind of a legacy concern, I would say, in the research priorities around learning more about suitable alternatives to BPA. I would say as well, I'm going to just use another acronym here, but hopefully folks know that when we refer to the other

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1	materials of concern, like PFAs, for example I've
2	heard the community's comments on that as well.
3	I've seen it several times in reviewing the
4	materials and do think it's worth some discussion
5	in our subcommittee, or in this conversation today
6	about how to include by name and by reference some
7	of the some other materials beyond just BPA that
8	I don't have concern for folks in the community.
9	So I'm going to pause for a second and
10	I guess, you know, again, in lieu of going through
11	every single research priority, I want to turn it
12	over for some discussion here because I think
13	that's the intention. I think we've all really
14	leaned into we've all really leaned into sort
15	of what this presentation from Mat would tell us,
16	and sort of how we really learn more about and
17	create feedback with NIFA about what's getting
18	funded, how we're learning about it in the process.
19	And I know a lot of you have some opinions about
20	that as well.
21	I also, you know, want to indicate as
22	well that I that was part of my question about

1	ORG. You know, how do we actually directly have
2	involved farmers in some of this research and sort
3	of keep it less about the ivory tower and more about
4	sort of helping people on the ground, at least solve
5	problems. I think that's what they're trying to
6	accomplish here. So I hear that as sort of a
7	meta-issue as well that I wanted to just flag too.
8	So with that, I'll pause.
9	And since the chair is the first
10	question, I will take the chair's role and say,
11	Nate.
12	MR. POWELL-PALM: Thank you. And then
13	I'll
14	MR. TURNER: What's your question?
15	What's your question?
16	MR. POWELL-PALM: I'll relieve you of
17	it.
18	I was really heartened to hear the
19	presentation today that our research priorities
20	are so deeply used to inform grant making. I think
21	one thing I would like us to do as a board is review
22	the respective priorities in our subcommittees and

1	try to find stakeholders for each of those
2	priorities. And so I know that we bring our own
3	expertise, so we have experience when we bring
4	research priorities forth, but I think it would
5	be better to really figure out where the rubber
6	meets the road as far as what does our respective
7	community need, and how do we internally start to
8	elevate priorities. I think we throw a lot on our
9	list, but it'd be knowing what Dr. Ngouajio said,
10	it seems like it's really worthy of our time to
11	figure out how to bring very specific anecdotes
12	from stakeholders, lists of stakeholders who need
13	this work done, what the outcome is, to help us
14	work on this ourselves internally and prioritize.
15	I will then jump over to Amy.
16	MS. BRUCH: Yes. Thank you, Nate.
17	Thanks, Board, for this discussion.
18	I think that's huge, Nate, actually
19	because I just sit and look at all of these
20	priorities. I think that they're meaningful.
21	They would help sometimes advance some of our work
22	agenda items that have, you know, the rest of the

1	story, I guess. I mean, it's great that they're
2	getting funded, but that information is so critical
3	for just advancing forward our industry, and I
4	think there needs to be some worthwhile discussions
5	on how do we get feedback loops. Stakeholder
6	comment was really great. I know on my farm in
7	a network of Midwest farmers, organic farmers were
8	taking on the battle of the no-till organic. It
9	self-funded a lot of it. We call it real-farm
10	research. And usually you learn a lot from your
11	mistakes. That's the best way to put it.
12	So I mean, if there is a a way to kind
13	of capture this information so it can be useful
14	there's a bunch of us farmers that would love to
15	be helpful in this regard. But we just I think
16	we owe it to ourselves in the community to get
17	information and communicate it and start crossing
18	some of these off the list because there's going
19	to be lots more to place on the list and it would
20	be nice to work our way through them. Thank you.
21	MR. POWELL-PALM: Gosh. I can't
22	second that enough. As an inspector, I've seen

1	so many of these research priorities solved in the
2	field by farmer, but that didn't that never gets
3	out to a broader audience.
4	Jerry, please go ahead.
5	MR. D'AMORE: Thank you very much.
6	MR. POWELL-PALM: If you would lean
7	into your mic just a little, Jerry, or speak up
8	just a little bit. It's a little faint.
9	MR. D'AMORE: Wait a minute maybe
10	if I is this any better?
11	MR. POWELL-PALM: A little bit.
12	MR. D'AMORE: Okay. I would just like
13	to address the issue of the research priority for
14	copper sulfate. What you said, Wood, was
15	absolutely spot on for a year ago today. We were
16	called to task, I think, on the wording that
17	predated what's what we have now. The this
18	research priority on disease control is a pillar,
19	I think, of support for copper sulfate. And as
20	a response to our stakeholder community and I
21	think what's there now has been good for a year

and is first rate. So I thank you for that. And

I really do think that the issue of, you know, from
our stakeholder community has been quiet for a year
that I see. So, thank you.

4 MR. POWELL-PALM: Brian, please go 5 ahead.

6 MR. CALDWELL: Thank you, Nate.

I feel like, unfortunately my brain is kind of, like, headed into the slippage But one of the things that really zone here. strikes me with our research priorities is we have sort of two different types. And one type is sort of a broad, you know, topic to discuss. another -- the other type is a series of really specific questions that we want answered usually, as part of our specific, you know, work with materials and whatnot. And I can -- it was really interesting to me when Mat mentioned the successful proposal that listed three NOSB priorities and they were all pretty broad. There was, like, no-till and side-by-side comparison trials, and then something else. But something like, you know, sort of the fate of copper, or something like that,

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is never going to be, I mean, it's -- the chance
of that being part of these kind of mega-projects
that OREI is funding is really small, you know,
and it's not going to be answered that way.

And I'm just feeling like maybe we need a two-pronged approach of getting these things answered. The more I think about it, it would just be really fantastic if there was some kind of a small project -- a small program within USDA, within NIFA, or whatever was the appropriate group that could address with small pots of money, but specific questions that we had and, you know, kind of really try to nail it. But, you know, the kind of -- the overarching OREI and ORG projects that I've certainly been involved with, at least three of them, they're not going to look at these kind of specific questions. So just wanted to put that out there.

MR. POWELL-PALM: I think that's a great question. It would be a nice follow-up question to Dr. Ngouajio as well, seeing how we strike that balance. That's a great point. I

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2	Carolyn, please go ahead.
3	MS. DIMITRI: I have a couple of
4	comments related to what Amy said and then what
5	Brian just said. And so I think, like, as a
6	the OREI grants are all integrated. So that means
7	that all researchers need to partner with either
8	extension or education. So I think farmers are
9	where the extension piece comes in. And so the
LO	information that gets disseminated like, I
L1	usually partner with someone from NCAT. So Amy,
12	I think this is what I was thinking when you
L3	were talking. It's, like, I think it would be
L 4	really it's really helpful when farmers have
L 5	really close relationships with NCAT and other
L 6	people that do outreach because it sort of makes
L7	that circle a little bit easier to close. Because
L8	they're they tend to do a lot of outreach, but
L 9	they also kind of share information with
20	researchers like, this is what, you know, these
21	farmers that I know, I think is really important.
22	So, I mean, I guess maybe thinking

think we should definitely follow up with that.

I know what -- well, Amy, you already do a million things, but if there is just more involvement on the part of organic farmers, I think, in this general, talking a lot to extension people would be really helpful in just pushing forward thing -- pushing forward important questions, but also getting the information translated back to the farm.

And then, Brian, when you were talking I was thinking, yes, this has always been my thing. It's, like, I'm a researcher and I just really kind of do what I want. And if it -- if my interest happened to align with the NOSB, then I would find that helpful, but I would probably not change what I was doing based upon the NOSB list. So these very specific things I think could be part of cooperative agreements and I'm, like, really going out on a limb here. So, like, NIFA can't give cooperative agreements through the OREI or ORG because the way the Farm Bill gives them money, just wonder if there's some way but Ι for stakeholders to get involved.

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1	We have a Farm Bill cycle coming up.
2	Like, is there a way to either have, like, some
3	other kind of grant program? And I know this is
4	a very heavy lift, but that would be something that
5	would be more along the lines of a cooperative
6	agreement. And then there could be a lot more
7	control. And these more refined but very specific
8	questions that are important, maybe, to an organic
9	farmer or an organic handler more than it would
LO	be to a researcher. So I'm just thinking, trying
11	to think of ways out of the box. Because I think
12	the way the funding system is set up right now,
L3	Brian's right, we're not going to, you know, very
L 4	specific materials questions are not really going
L5	to be addressed.
L 6	MR. POWELL-PALM: Thank you for that.
L7	Kyla, please go ahead.
L 8	MS. SMITH: I think along all these
L 9	lines I was just trying to think about how do we
20	get it the information back out, or whatever.
21	And so, you know, Dr. Ngouajio was talking about,
22	you know his challenges within his team. And so

-- and Amy is talking about, you know, just on-farm 1 that isn't 2 research that happens, part of 3 necessarily a big funding stream or any type of grant or co-operative agreement, or whatever. 4 So I was just thinking, like, is it -- would it even 5 6 be possible to periodically pull together, you 7 know, various folks to do, like, a research update. And there could be, I don't know, someone who's 8 9 done some on-farm something; someone who's wrapped up there OREI grant; someone who's had, you know. 10 11 We've also been texting a little bit amongst --12 and, Amy, you were mentioning about how just there's, like, all these other, like, ag grants 13 that are out there too that are, like, not within 14 15 So, like, I don't know, just try to OREI stream. pull together pieces, parts, to get every so often 16 just an update of what's going on out there. 17 18 MR. POWELL-PALM: I think that would 19 be huge. Ι think, if I might, I think the foundation of that question is trying to get more 20 stakeholder outreach from Board to 2.1 the 22 respective communities to try develop these

channels of communication. Who's doing the research? If each of us knows a research in our community -- a researcher in our communities that we could tap to try to get a summary from, I think that would be super helpful, just to kind of create small pipelines of information to feed into the Board and share with each other.

Allison, please go ahead.

MS. JOHNSON: Thank you. This list is so long, and it feels like there's so much work So I'm looking at it kind of with two big sets of stakeholders in mind as I think through what the highest priorities from my perspective And so one group of stakeholders is would be. people who need help with production practices. And from that point of view, I'm wondering about who is served and who isn't served well enough. And then I'm also thinking about what other audiences might be interested in the outcomes of this research. And so there, what comes up to me is, who needs more research to be convinced that organic is valuable.

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1	So two things that come to mind that
2	I didn't see on the list yet, I just wanted to offer
3	in addition to, these all being really important
4	priorities. One is regionally relevant
5	techniques that are important in underrepresented
6	regions. So the main one that comes to mind there
7	from interviews I've done with organic producers
8	is high tunnels in the south. It's an area that
9	has a pretty small organic sector and the
10	everyone that I've spoken with really in the south
11	has said that they haven't found much help in
12	managing their systems in a high tunnel context.
13	And then the other is on the climate
14	change priority. I think we heard a lot yesterday
15	about an audience that needs convincing with
16	quantification and maybe just documentation of the
17	qualitative benefits of organic. So it seems like
18	we're in a moment where even if, you know, we as
19	a practical matter recognize that there are a lot
20	of benefits out there, there's an audience that
21	needs to see it written down in a journal to believe
22	it or to be able to advance a policy or whatever

else may follow from that. So I'd love to see that included too.

MR. POWELL-PALM: I think that is huge looking at the climate-smart solutions information that I heard yesterday, that's -- we could have entire extra subcommittee on climate-smart solutions for figuring out what math needs to back up what practice. So, yes. That's a great point and we should definitely be considering that.

Liz, please go ahead.

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GRAZNAK: I quess I'm not 100 MS. percent positive that this group is the one that needs to hear this. But the thing that immediately popped into my head was, in the last 12 years, I have participated in a number of our research projects with local universities that are doing, you know, research here. And I personally, you know, think that the work they're doing is super important and so I'm willing to participate. Also, I'm, like, one of the only organic farms that they can ask to participate. But the amount of money that they offer farmers to be the

participating farm is laughable. You know, like 1 200, \$300. I mean, it's such small amounts of 2 3 money that for the amount of time and, you know, growing space and, et cetera, that it requires of 4 5 the farmer to participate in the research project, it's huge and the -- what they are thinking that 6 the equivalent amount, you know, of money that they 7 offer us, it's really, sort of crazy. 8 9

You guys aren't the ones that really need to hear that. But for 12 years, that's what I've been dealing with with the people that are asking me to participate. And honestly, the last two times that I've been asked, I've said no. I've said no, not doing it. And that's unfortunate for them because literally they don't have other organic farms that they can ask in Missouri. So anyways, again, not that you guys are the ones that need to be hearing that. But, yes.

MR. POWELL-PALM: I would say that we are the ones who need to be hearing that just because articulating what those barriers are for all of us. And to kind of say, I'm in the same

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1	boat, Liz. I have definitely participated in
2	these projects. And when you have a field test
3	plot right in the middle of your field and you have
4	to make all these turns in your tractor
5	MS. GRAZNAK: Right.
6	MR. POWELL-PALM: around it, it's
7	worth a lot more than 200 bucks.
8	MS. GRAZNAK: Yes.
9	MR. POWELL-PALM: It doesn't seem like
10	a lot of labor but it really adds up. So thank
11	you for that.
12	Brian, please go ahead.
13	MR. CALDWELL: Really quickly. I'm
14	going to write a long e-mail to OR ORF what
15	is it OFR?
16	MR. POWELL-PALM: OFRF.
17	MR. CALDWELL: Excuse me OFRF, who
18	is going to be evidently doing some kind of
19	evaluation of NIFA, putting out a bunch of this
20	stuff. And to our partners who are watching this
21	whole exchange here, I want to put out there that
22	applying for one of those conference or several

1	of those conference grants that Mat mentioned, that
2	is a way to get all that information spread out
3	to your regional producers. So that can those
4	are pretty easy to get. There's not a lot of
5	funding there, and that's a really good avenue for
6	information sharing.
7	MR. POWELL-PALM: Absolutely.
8	Javier, please go ahead. I think
9	you've muted, Javier. Go ahead.
L 0	MR. ZAMORA: Yes. I couldn't unmute
L1	myself. I will just echo what Liz said. And you
L2	kind of get overwhelmed sometimes with so many
L3	researchers. They hear of your name, you're a good
L 4	collaborator. The amount the rewards for the
L5	farmer are very limited. But, Liz, I can say that,
L 6	I mean, I can tell you
L7	MS. GRAZNAK: They should pay you more.
L 8	MR. ZAMORA: in the next three weeks
L 9	I'll have a farm journal here with collaboration
20	with the NRCS. I'll have a couple of other
21	organizations, like ALBA doing a, you know,
22	strawberry field day and that sort of thing. We

1	had, I mean, you've I can name ten things that
2	I'm doing this year, just collaborating with other
3	people. But, yes, there is there seems to be
4	very little that goes directly to the farmers that
5	are being that collaborate in this situation
6	for research. And, you know, sometimes it just
7	the way that the grants and how the money
8	funnels down and trickles down it's it needs
9	to be it needs some arrangement there, I think.
10	So I just wanted to echo that, Liz.
11	But don't give up because your name gets out there
12	and then maybe you'll you apply for a grant and
13	then maybe hopefully you'll get it, you know.
14	At least that's what happened to me. I got a CDFA
15	grant to build some hedgerows. And it was, like,
16	40 grand, which is really good. So anyway, that's
17	all I wanted to say and yes, when it comes to
18	that.
19	MR. POWELL-PALM: I'll kick it back to
20	you, Wood.
21	MR. TURNER: Thanks for the
22	discussion, everyone. I'd like just to reiterate

1	Nate's point, I would just suggest that coming out
2	of this meeting that you all, you know, bring your
3	set of priorities back in front of your committees
4	and make sure we've discussed and incorporated any
5	new thinking any of you has on the and we'll
6	get this document updated and kind of reflecting
7	some of our real-time thinking on this. So thanks
8	very much for that.
9	With that, let's move on over to Mindee,
10	the lead on our work the committee's work
11	subcommittee's work on excluded methods. We have
12	a proposal in front of the board.
13	Mindee.
14	MS. JEFFERY: Thank you. First off,
15	I'd like to thank the materials subcommittee.
16	This subject can really give a person stagefright
17	and the Board has really answered the call to review
18	drafts. So thank you very much, everyone.
19	The organic community consistently
20	acknowledges that regulatory frameworks using a
21	process-based approach in definitions as a trigger
22	for regulatory oversight needs to be updated to

remain relevant. We watch as new techniques in biotechnology rapidly outgrow our regulatory definitions requiring a high level of specialized knowledge to make clear distinctions when we are classifying excluded methods for this USDA version of organic systems. It is an untenable position as the biotech industry is rapidly outpacing any regulatory structure and his very difficult to track.

Before us in this meeting is a proposal to clarify which methods are considered excluded in organic production, specifically cell and protoclast fusion. In this case, we are making a minor clarification to the TBD list. This proposal seeks to remedy the information provided on these text tweaks as there is information in terms defined at 205.2, Policy Memo 13-1. And there were follow-up notes on both techniques left in the excluded message charts by previous NOSB work. It is clear from terms defined, the policy memo, the NOSB's work, and stakeholder feedback that our community is aligned with the proposal

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to list cell and protoplast fusion as excluded 1 methods, except when the techniques are employed 2 3 within taxonomic families, with a consistent suggestion from stakeholders for a language tweak. 4 5 In public comments one group expressed full 6 support for the NOSB recommendation as stated in 7 the published proposal with one small suggestion regarding the definition. 8 And do we have a slide there? 9 Thank 10 you. 11 suggest that recombinant DNA be 12 changed to in vitro nucleic acid technologies to provide a more comprehensive definition. 13 In vitro nucleic acids technologies includes techniques 14 15 including recombinant DNA and ribonucleic acid RNA techniques that use vector systems and techniques 16 17 involving the direct introduction into 18 organisms of hereditary materials prepared outside 19 the organism. Because it is not only DNA that can 20 be manipulated, but also RNA and other materials, we find this definition to be more comprehensive. 2.1

In addition, this is the definition used by Codex,

which brings our standards into alignment with this
global standard.

This was a consistent suggestion across stakeholder groups. Seed companies expressed full support for this proposal. Their comments represented along with a strong emphasis on the need to strengthen organic seed requirements. seed producer reflected that we are facing the potential stagnation of organic seed usage and a weakening in the resiliency and public perception of the organic produce market. Another group noted that the transgression of excluded methods into organic systems continues to create an unjust playing field with the burden falling squarely on the shoulders of growers and markets that do not benefit from, and in fact, are harmed by the presence of these excluded methods.

Here, I would echo the notion that the best way to prevent excluded methods transgressions in seed supply is to grow our investment in certified organic seed. I was happy to hear that stakeholders have elevated this issue

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as a priority and thank Dr. Tucker for reflecting 1 2 the concern in the program update yesterday. 3 thank you, Kiki, for your presentation. Farmers and producer groups were also 4 5 in full support of the passing of the proposal, 6 also suggesting the amendment to the language. 7 Ιn conclusion stakeholders agreed that the determinations for when and where both techniques 8 are to be allowed or excluded as outlined in the 9 10 proposal language are correct with this minor 11 adjustment, as you can see on the slide. The materials subcommittee was concerned that 12 13 suggested language amendment would constitute a substantive change, sending us back to work in 14 15 subcommittee. We raised this concern and would like to thank that program for providing the 16 clarification that this is a technical correction 17 18 that can be addressed in our cover letter should 19 we pass the proposal. 20 And there I will take your questions. MR. POWELL-PALM: 2.1 Yes. Thank you for 22 this work, Mindee. This has been a huge lift.

So I really appreciate your expertise and time here. Brian has a question for you.

MR. CALDWELL: No. I just want to thank Mindee for her tremendous work on this over a long period of time. And she's intending on going a long way into the future with it too, and get more of these TBD lists, you know, resolved, which they've been hanging around for over a dozen years, some of them. So I really appreciate that. And one last comment as we move forward is that -- just want to point out that the definition of excluded methods talks about the -- I'm going to read it here: A variety of methods used to genetically modify organisms or influence their growth and development by means that are not possible under natural conditions, et cetera.

And I just want to point out that whole thing of -- that whole point of it's the means, not the ends, that they're talking about. So sometimes a genetic change could have happened naturally, but you just use other means to accomplish it. But it's the means that we're

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looking at, not the ends. So that's -- it's kind 1 of a subtle distinction, but it's really important 2 3 as we move forward with some of these gene editing techniques and other aspects where the changes 4 5 might have been possible naturally if, like, 6 everything had been given 50 years of, like, you 7 know, millions of crosses and you could finally get that thing. But what we're talking about here 8 is whether the means used to accomplish that same 9 10 goal are allowed or not. So that's just my little 11 caveat there with everything. But thanks so much, 12 Mindee. 13 MR. POWELL-PALM: Amy, please go ahead. 14 15 MS. BRUCH: Yes. Thank you, Mindee. This is incredible work, very important to our 16 community, just clarity on these issues. And one 17 18 comment that really echoed with me just even 19 throughout this whole -- throughout our whole work 20 agenda is just the importance of elevating these issues outside of the handbook for our standard 2.1 22 operating procedures and getting them really coded

1	in the regulations. So instead of them being
2	voluntary, we can really have some meat for
3	regulation. So just wanted to bring that comment
4	forward and highlight that. Thank you.
5	MR. POWELL-PALM: Thank you, Amy.
6	Any other questions, or comments, or
7	discussion?
8	MR. TURNER: Wood.
9	MR. TURNER: I just want to say really
10	quickly
11	Sorry, Javier.
12	I just want to say really quickly, again
13	just giving props to Mindee for the passion and
14	the sense of purpose she has for this work. It's
15	just it's infectious for all of us. And I think,
16	you know, if we can all bring as much of that energy
17	to everything we do, it's we're going to be an
18	effective board. So I just wanted to say that.
19	MR. POWELL-PALM: Amen. Thank you for
20	that, Wood. I couldn't agree more.
21	Javier, please go ahead.
22	MR. ZAMORA: Hey, Mindee I this is

1	kind of this is where I find myself a little
2	crossroads. I'm trying to understand what exactly
3	this wording change will mean. And to me, it feels
4	like there is some sort of a need for me to have
5	some examples of what is it that they're talking
6	about. Because I when you start thinking of
7	listening to some of the comments like, you know,
8	advancing plant propagation or something that
9	could potentially happen in 50 years and you're
10	going to speed the process, it just sounds like
11	GMO to me. And it's just, I mean, I'm not, you
12	know, I don't have the knowledge to really
13	understand how this process work. So I am going
14	to need some help and really to make to
15	understand what exactly this excluded method it's
16	trying to accomplish. And who, you know, who's
17	really asking for this change if in fact it's a
18	change, or it just the wording on how it's written.
19	MS. JEFFERY: Is your question
20	specifically in addressing the word change in the
21	proposal, or do you want me to give you a larger
22	overview of the excluded methods issue?

1	MR. NANDWANI: I think I mean, if
2	we probably are out on time, but I will probably
3	like to hear you just so I can understand that.
4	I'm sure there is a lot of people that don't really
5	have the knowledge exactly of especially in the
6	farming community, that what is it that the Board
7	has been asked to look at or perhaps change?
8	MS. JEFFERY: Yes. In this specific
9	instance, how we go about how biotechnology has
L 0	progressed, and how it applies the technology is
L1	happening so fast that, honestly, I just didn't
L2	get the words right with the recombinant DNA
L3	technology, that's a few years old way of
L 4	addressing the issue. And so the in vitro nucleic
L 5	acid technologies is a better update because now
L 6	we need to use the they're using the technologies
L 7	in more subtle and subtle ways inside the cell.
L 8	How'd I do, Dilip, did I get it right? Do you
L 9	want to take do you want to speak further to
20	that?
21	MR. NANDWANI: May I add a quick
22	comment chair?

1	MS. JEFFERY: Yes. Do.
2	MR. NANDWANI: I would say first thing
3	Javier's question, and this is very simple and no
4	one can deny it. Everybody will be agree that
5	nucleic acids are RNA and DNA in the scientific
6	world. So there is no doubt about that. Nucleic
7	acid, if we change the term from recombinant DNA
8	technology and we change to in viro nucleic acid,
9	it rather it's helpful for us and organic
10	community because, you know, let's say 20 years
11	ago, 30 years ago, we had only DNA recombinant
12	technology, but now we have RNA technologies also.
13	This COVID vaccine, by the way, just giving an
14	example is it's from MRNA MRNA technology.
15	So nucleic acids are DNA as well as RNA. So in
16	almost so many years now, we know about this and
17	scientific world is using. So this is a correct
18	term using the nucleic acid technology and we are
19	including RNA. So that's good actually.
20	Now, the second question is whether we
21	go about this and how, that's is still open and
22	I'll leave it to the board.

1	Do you want me to add something else,
2	Mindee?
3	MS. JEFFERY: Well, Yes. I mean, it's
4	a very complicated subject the way that we deal
5	with excluded methods and I'd be really happy to
6	go over that in depth. We have the definition and
7	because the technology has moved so much over the
8	years, the work were doing in this context is to
9	keep up with biotechnology progress so that we are
10	defining things that we will exclude because they
11	are genetic manipulations, is the sort of the
12	simple, fast way to say it.
13	MR. NANDWANI: Correct.
14	MS. JEFFERY: Yes. Now, we can keep
15	talking about this, but in this particular
16	instance, thank you for your explanation and your
17	assistance, Dilip. I appreciate your expertise.
18	MR. NANDWANI: No. You nailed it down
19	correctly, exactly. I mean, you did very well.
20	Thank you.
21	MR. POWELL-PALM: Any other questions
22	or discussion for Mindee?

1	MS. JEFFERY: I really appreciate the
2	written comments wherein someone referred to this
3	as mind-bending subject. So we're all in it
4	together.
5	MR. POWELL-PALM: All right. Well,
6	not hearing oh, yes. Any others?
7	MR. TURNER: No. I just wanted to
8	I'm happy to turn it over to you, Nate, in terms
9	of how we're going to field it.
10	MR. POWELL-PALM: Sure. Yes. If
11	we have a proposal. So we are going to be voting.
12	And so the motion is I'll let Mindee, I think,
13	let's see
14	You made the motion. Please repeat
15	your motion.
16	MS. JEFFERY: It's pretty long. There
17	it's on there's it's on the slide. There's
18	two. Do you really want me to read the whole thing?
19	MR. POWELL-PALM: Not really.
20	So we can see the motions as displayed
21	on the slide. The motion was made by Mindee and
22	seconded by Logan. And if I have this right, Kyla,

1	we're going to be starting with Carolyn, or are
2	we starting with Rick?
3	MS. SMITH: I think I I think I have
4	it starting with Rick.
5	MR. POWELL-PALM: Rick. Okay.
6	Perfect. All right.
7	So Rick, what is your vote? Do we still
8	have Rick? Let's see. Oh, he's almost back.
9	MR. TURNER: There he is.
10	MS. SMITH: You might have to tell him
11	again. He may not have heard you.
12	MR. POWELL-PALM: Rick, you're going
13	to be the first one to vote on this one.
14	MR. GREENWOOD: Yes.
15	MR. POWELL-PALM: All right. We have
16	a yes from Rick.
17	Moving on down, Liz.
18	MS. GRAZNAK: Yes.
19	MR. POWELL-PALM: All right. And then
20	Kim.
21	MS. HUSEMAN: Yes.
22	MR. POWELL-PALM: Mindee.

1	MS. JEFFERY: Yes.
2	MR. POWELL-PALM: Allison.
3	MS. JOHNSON: Yes.
4	MR. POWELL-PALM: Dilip.
5	MR. NANDWANI: Yes.
6	MR. POWELL-PALM: Logan.
7	MS. PETREY: Yes.
8	MR. POWELL-PALM: Kyla.
9	MS. SMITH: Yes.
10	MR. POWELL-PALM: Wood.
11	MR. TURNER: Yes.
12	MR. POWELL-PALM: Javier
13	MR. ZAMORA: Yes.
14	MR. POWELL-PALM: Amy
15	MS. BRUCH: Yes.
16	MR. POWELL-PALM: Brian.
17	MR. CALDWELL: Yes.
18	MR. POWELL-PALM: Jerry
19	MR. D'AMORE: Yes.
20	MR. POWELL-PALM: And Carolyn.
21	MS. DIMITRI: Yes.
22	MR. POWELL-PALM: And the chair vote

1 yes. 2 I have 15 yes, 0 no, 0 MS. SMITH: 3 abstain, recused, absent. The motion passes. MR. POWELL-PALM: If I were in person 4 again, a big applause for the work Mindee did to 5 6 get us all through this. It was incredible work. 7 MS. JEFFERY: Everybody, like I said, I was begging people to read things again and they 8 9 did. 10 MR. POWELL-PALM: So thank you, 11 everybody, so much. That concludes today. 12 going to pick up DTO and finish off the material subcommittee agenda tomorrow during the deferred 13 votes period. And tomorrow we're going to start 14 off with another heavy hitting group, and that is 15 the crops subcommittee. And we're going to have 16 a lot of good work to do there. And then after 17 18 crops we'll go to lunch. Policy development will 19 be next. Go into our deferred votes review, NOSB work agenda and material updates. Give a formal 20

welcome to our new members, and then have other

business.

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1	So any closing questions from the board
2	or Jenny?
3	MS. SMITH: Just clarifying. So we're
4	just going to start with crops not finish out
5	material which is DTO. Okay.
6	MR. POWELL-PALM: Correct. Yes. So
7	we're going to in our agenda where we see
8	Deferred Votes, we're going to put the rest of
9	materials in that time slot.
L 0	MR. TURNER: I missed that. I didn't
L1	hear that. Okay. So got it. Thanks for asking
L2	the question, Kyla.
L3	MR. POWELL-PALM: Thanks for asking,
L 4	Kyla. Appreciate that. Yes.
L5	MR. GREENWOOD: And I appreciate it
L 6	because with a couple of things we may take a fair
L7	amount of time. So that'll be by the way, I
L 8	left the camera to separate one of my dogs from
L 9	a very large snake. So that's
20	MR. POWELL-PALM: Oh. Very good.
21	MR. GREENWOOD: We're all living,
22	though.

1	MS. TUCKER: That's going to be in the
2	transcripts for this meeting.
3	MR. GREENWOOD: And it probably
4	deserves to be there. They know it's real.
5	MS. TUCKER: Definitely. Definitely.
6	Your dogs deserve to be captured in perpetuity
7	there.
8	Nate, beautiful job today.
9	MR. POWELL-PALM: Thank you, everyone.
10	Today was a great day. I have nothing but deep
11	gratitude again, for all of your work and bearing
12	with us, and to our speakers today, and always to
13	Michelle for keeping us afloat. So thank you,
14	everybody, again, and we we'll see you tomorrow.
15	All right. Take care everyone.
16	MS. SMITH: Thanks, everybody.
17	Right. So I'm going to stop the recording.
18	(Whereupon, the hearing in the
19	above-entitled matter was concluded at 5:32 p.m.)
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UNITED STATES DEPARTMENT OF AGRICULTURE

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NATIONAL ORGANIC STANDARDS BOARD

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SPRING 2022 MEETING

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THURSDAY APRIL 28, 2022

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The Board met via Videoconference at 12:00 p.m., Nate Powell-Palm, Chair, presiding.

PRESENT

NATE POWELL-PALM, Chair
MINDEE JEFFERY, Vice Chair
KYLA SMITH, Secretary
AMY BRUCH
BRIAN CALDWELL
JERRY D'AMORE
CAROLYN DIMITRI
ELIZABETH GRAZNAK
RICK GREENWOOD
KIM HUSEMAN
ALLISON JOHNSON
DILIP NANDWANI
LOGAN PETREY
WOOD TURNER
JAVIER ZAMORA

NOP STAFF PRESENT

MICHELLE ARSENAULT, Advisory Committee Specialist JARED CLARK, National List Manager

DAVID GLASGOW, National Organic Program Associate Deputy Administrator

ERIN HEALY, Standards Division Director

ANDREA HOLM, Materials Specialist

DEVON PATTILLO, Standards Acting Assistant Director

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

CONTENTS

Crops Subcommittee (CS) Topics: Proposal: Highly Soluble Nitrogen Fertilizers.... Proposal: Carbon Dioxide - petitioned 2024 Sunset Substances Review: Herbicides, soap-based Biodegradable biobased mulch film Boric acid Sticky traps/barriers Elemental sulfur Coppers, fixed Copper sulfate Polyoxin D zinc salt Humic acids Micronutrients: Soluble boron products Micronutrients: Sulfates, carbonates, oxides, or silicates of zinc, copper, iron, manganese, molybdenum, selenium, and cobalt Vitamins C and E Squid byproducts Lead salts Tobacco dust (nicotine sulfate) Policy Development Subcommittee (PDS) Topics: Proposal: PPM Updates - Public comment process Deferred Votes NOSB Work Agendas/Materials Update Welcome New NOSB Members Other Business and Closing Remarks

1 P-R-O-C-E-E-D-I-N-G-S 2 (12:03 p.m.)3 MS. PETREY: -- I need to -- the webinar is being recorded and we'll have a full transcript 4 of the entire meeting, including the two comment 5 webinars from last week that will be available a 6 couple of weeks after the conclusion of the meeting 7 today. All right. Nate, I am going to turn it 8 9 over to you. All right. 10 MR. POWELL-PALM: Thank 11 you and good morning, everybody. We had a good 12 rain here last night, so I'm just reveling in my sprouting seeds. I hope everyone's doing well out 13 If I might, and I know this is a 14 there today. 15 burden on all of my fellow members. If we could go through role call again. And again, if you 16 would report to the group what you found most 17 18 exciting and innovative, delightful about 19 I was really, I think it's a really yesterday. 20 good reflection. We had some wins yesterday as

a group. Our work really sailed through. So I'd

love to hear some reflections on that.

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And we'll

go quickly and then dive into crops, which will 1 be ever more exciting. But if we wanted to get 2 3 kicked off, it'll be a way that we all wake up together and get that -- get things rolling. 4 to start I won't make you go first every time Amy, 5 so I'm going to start with Brian. 6 7 MS. BRUNCH: Oh, no, you have to go with Wood and Javier having to go at the end. 8 a Z. 9 POWELL-PALM: You're MR. right. Okay. So let's start with Wood. 10 You're right. 11 So he's not always at the end here. 12 MR. TURNER: Now the pressure's on --I shouldn't -- I should've never said that. 13 14 why in the world? Well, let's see, Wood Turner 15 happy to be here today from California. You know, I think since the research priorities process has 16 been so -- we've also leaned into it and events 17 18 eventually did entered of what it really means and 19 that really works. I feel like we got some clarity 20 onto the what that -- what the impact of that process can be and through our role and I thought 21 22 that was great yesterday, so thanks.

1	MR. POWELL-PALM: Absolutely.
2	Javier, please go ahead.
3	MR. ZAMORA: Good morning, everyone.
4	Buenos dias. I just felt a lot more comfortable
5	yesterday and I'm just amazed on the wealth of
6	knowledge on some of that new Board members and
7	some of the, you know, older Board members and just
8	how cohesive this Board is on how such a good work
9	that's getting done. Yes. Excited.
10	MR. POWELL-PALM: Hear, hear. Amy,
11	please go ahead.
12	MS. BRUNCH: Thank you, Nate. Welcome
13	from Nebraska. Hopefully, we'll get that rain
14	that you had, Nate.
15	MR. POWELL-PALM: We're sending it
16	your way.
17	MS. BRUNCH: Maybe today because we're
18	east of you, yes, hopefully. Anyway, gosh, I was
19	at I was thinking I was going to go at the end.
20	But yesterday, just in reflection, I was really
21	impressed with the different perspectives that the
22	Board was able to discuss. I was really overjoyed

by just the new member participation. 1 I loved relevant anecdotes to the 2 Dilip's excluded 3 methods. and just providing some additional technical information. I know each and every one 4 5 of you have a great perspective and I'm looking forward to having and hearing more of that in our 6 7 conversations. Thank you. MR. 8 POWELL-PALM: Thank you, Amy. 9 Brian, please go ahead. 10 MR. CALDWELL: Hi, Brian Caldwell, 11 here from Central New York, where we had snow 12 flurries yesterday, which was kind of amazing for me, but I was really sort of intrigue by the seed 13 And I felt like it could have gone 14 discussion. 15 on for hours because there were a whole bunch of issues that I had thought of, but we didn't have 16 17 enough time to really cover it. And it's such an 18 important issue, and it has just like everything 19 else that we seem to get into here. The more you 20 it, the more sort of into nuances aet

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convolutions there are.

the seed discussion.

So I was fascinated by

1	MR. POWELL-PALM: I think it speaks
2	volumes to a lot of the issues as a community that
3	we're experiencing. It kind of housed a lot of
4	our concerns. So I think it spoke to a lot of
5	folks. Thank you for that. Jerry, please go
6	ahead.
7	MR. D'AMORE: Hello. And I am
8	probably still a little handicapped on volume.
9	I thought I had it fixed, but it's not, so I'll
LO	talk loudly. I'm just going to have to echo the
L1	thoughts about our brand new class that came in.
L2	It just like looks like they've been around
L3	for a year already. I'm just in awe of you in the
L 4	way you just have fit in and participated. So
L5	thank you.
L 6	MR. POWELL-PALM: Hear, hear. Next up
L7	we have Carolyn.
L 8	DR. DIMITRI: Good afternoon,
L 9	everyone. I'm not a farmer, but I do can tell
20	you it is cold outside in New York City. I had
21	to wear down coat today. I quite enjoyed the
22	conversation and the presentation on seeds And

I think there are a lot of really interesting 1 2 economic issues worth studying in terms of adoption 3 of organic seed and how that will play out over the future. 4 Thank you. Thank you. 5 MR. POWELL-PALM: Rick? 6 MR. GREENWOOD: Yes. Rick Greenwood, 7 calling in from the San Diego area of California. And I think I want to echo what Wood said. T've 8 been on the Board for a long time and we've worked 9 10 on research priorities. And I never really felt 11 that they went anywhere. We spent a lot of 12 discussion, had a lot of priorities and then they 13 just disappeared and I think having the discussion and knowing that they get acted on and that if we 14 15 can close the loop. So we really know what happens I think it's going to make the whole issue 16 to them. of finding the priorities more important. 17 18 one thing to work on and stuff. But if you don't 19 think it goes anywhere, it seems like a meaningless 20 activity. So I thought that was great. And the other thing is how well we're working as a Board. 2.1 22 I mean, it really seems like we're a well-oiled

1	machine, so I'm impressed.
2	MR. POWELL-PALM: As our senior
3	member, that is very meaningful coming from you
4	because we have no point of reference. Other than
5	this is what
6	MR. GREENWOOD: I hope you mean, the
7	longest serving member, not the
8	MR. POWELL-PALM: Longest-serving
9	member, of course.
10	MR. GREENWOOD: Not the most senior
11	member, although that's probably true also.
12	MR. POWELL-PALM: Well, thank you for
13	that. Liz, please go ahead.
14	MS. GRAZNAK: Good morning from
15	Mid-Missouri. Liz Graznak, Happy Hollow Farm.
16	I still definitely feel new and that there is a
17	whole lot that I need to learn. But I really am
18	enjoying myself and I did also really appreciated
19	the two presentations about seeds and research in
20	the role of NIFA yesterday, those were great.
21	MR. POWELL-PALM: Thank you for that,
22	Liz. Kim?

Τ	MS. HUSEMAN: HI, good morning.
2	Kimberly Huseman, I'm in Windsor, Colorado. From
3	yesterday's conversations beyond what's already
4	been mentioned, I'm going to give a shout out to
5	Kyla. Your description and how we talked about
6	the classifications as we're looking at sunsets,
7	and the early days of sunsets, and I've noticed
8	over the past three years, or my time on the Board,
9	is going to my third year, how we're all, you know,
10	we're talking about are things properly classified
11	and what are those classifications like at or
12	look need to look like. So your expertise there
13	is very well welcomed on the Board, so shout out
14	to you.
15	MR. POWELL-PALM: Hear, hear.
16	Mindee, please go ahead.
17	MS. JEFFERY: Similar echo, a lot of
18	the thoughts from the deliberate on the new
19	members and all the presentation information, and
20	I really appreciate our ability to deliberate.
21	And just want to thank everybody for bringing the
22	heat on my sunset.

1	MR. POWELL-PALM: We saw an
2	opportunity, talked about those pig intestines,
3	and we were rescued. Allison, please go ahead.
4	MS. JOHNSON: Hi, everyone. Yes,
5	aside from the beautiful picture of a barrel of
6	intestines that I'm going to hold in my head for
7	a long time. I was really pleased and surprised
8	at how much cohesion and there was on just core
9	organic principles yesterday, QUATs and excluded
10	methods. It's just really clear that there's a
11	lot of consensus about what should and shouldn't
12	be in organic. And I appreciate all the
13	stakeholder help in, you know, getting the words
14	just right, but, especially, you know, coming in
15	as a new person from, like, a moderately engaged
16	organic consumer position, you hear a lot of
17	controversy and focus on disagreement on the
18	outside. So it's really affirming to remember how
19	much agreement there is, and I'm excited for that.
20	MR. POWELL-PALM: Absolutely. Thank
21	you for that. Dilip, please go ahead.

DR. NANDWANI: Good morning, can you

1	hear me well? I changed my microphone today.
2	MR. POWELL-PALM: Yes.
3	DR. NANDWANI: Good. Thank you.
4	Good morning again from Tennessee. It's nice
5	weather today, it's a little bit warm. It was very
6	cold yesterday, around 40 degrees, so that's
7	exciting. Well, yesterday, the second day of
8	meeting went very well and I am thankful to all
9	the members and administrators, you know, for their
10	support. I presented my sunset and I kind of
11	stumbled when Brian asked me the question and I
12	told myself that, Dilip, you have to be prepared
13	next time. So I learned something, but it's very
14	exciting of course, and learning. And I found that
15	both speakers, Kiki (phonetic) and Dr. Gwajio
16	(phonetic) both were excellent and I learned a lot
17	of new information and thanks for the update they
18	provided. Thank you.
19	MR. POWELL-PALM: Thank you. Logan,
20	please go ahead.
21	MS. PETREY: I've got a touch-screen
22	computer now, so it's super easy. Anyways, I want

to thank you all for accommodating my tardiness 1 2 yesterday so I could vote and apparently I missed 3 the intestinal bill with Mindee, so I'm super glad you all could accommodate me. 4 You'll get a chance 5 MR. POWELL-PALM: in the fall. 6 7 That's all right. MS. PETREY: I'11 get the stomach for it. So yes, congratulations 8 to all the new members. You all participate very 9 10 well and way more than I did my first year. 11 you're bold, if anything. So you're doing great, 12 but it wasn't the two presentations, you know, mentioned that the research that we do have an 13 14 impact on what the research becomes. But -- and then also with the seed, it looks like we're also 15 looked at for implementation of things. So it is 16

the implementation. I think as long as we continue with both of those people will keep coming to the

neat to see the whole cycle of -- you know, we're

looked at for the ideas and innovation and also

Board for action and so that does make our stance

22 more powerful. So thank you.

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1	MR. POWELL-PALM: Thank you for that
2	absolutely. Kyla, please go ahead.
3	MS. SMITH: Thanks, everybody. I'm
4	here from with you today from Central
5	Pennsylvania. Kim, you'll be happy to know that
6	I already have a spreadsheet started tracking all
7	of the re-classifications suggestions that have
8	come in for public comment. Anyway I of course,
9	I'm like super happy and proud of Allison and Dilip
10	as fellow handling subcommittee members on their
11	first sunset presentations. And then the second
12	thing that I was excited about was Mindee's
13	presentation on excluded methods, and like getting
14	off of our work agenda and continuing to chip away
15	at that. And hopefully we'll see some action from
16	the program side. So excellent work carrying that
17	through, Mindee.
18	
19	MR. POWELL-PALM: And I'll close this
20	out. Nate Powell-Palm, Bozeman, Montana, Cold
21	Springs Organics. I wish I could just go through
22	and list all of the things I appreciate about each

1	and every one of you from yesterday because it was
2	just such a team effort to get through the agenda.
3	But I want to give a special shout out to Wood
4	because CPC is hard and I think that was really
5	well managed. You drove that train right. And
6	we were able to deliberate. It felt safe. It was
7	very comprehensive. And thank you for your
8	leadership on that. And I know you've given a
9	shout out to Mindee, but one more because excluded
10	methods very tricky and very core to our values.
11	And so the fact that we got through that and we
12	weren't all crying or frustrated is a testament
13	to your leadership. And just the groundwork that
14	you laid for us to engage this debate in this
15	discussion with a lot of really good information
16	two of the other things I wanted to throw in. It
17	was just so awesome when we were discussing CPC
18	and Rick came in with that real world example of
19	medical application. This is the expertise that
20	this Board brings is having where we are internally
21	able to have really incredible conversations just
22	with the 15 of us. It's a lot of expertise on this

for bringing 1 Board, SO thank you that. Additionally, a shout out to Dilip. When he came 2 in with the discussion about what into -- I need 3 to get it right, nucleic acid is, and how we're 4 looking at being really practical but really 5 effective with our wording and our definitions. 6 7 So thank you, Dilip, for bringing that. out to all of you as well. The participation was 8 great we got a lot of great work done. One more 9 10 day, guys. And we're going to get through it, so 11 12 MS. JEFFERY: Okay. I'm going to stop you there for one second, Nate and just take a 13 minute to like shout you out for great leadership 14 15 in your first meeting and really being able to address all those higher level topics with a lot 16 17 of class. 18 MR. POWELL-PALM: I appreciate that. 19 Well, it's a pleasure and an honor to work with 20 you all. One more shout out I wanted to give. And I think this really speaks to a lot about the 21 22 community, but Jenny has been at this work for

1	10-plus years now. That's huge. I think when we
2	think about how does organic really develop. You
3	got to have leadership that sticks around, gets
4	that institutional knowledge, and can keep leading
5	us. So Jenny, we hope you have at least another
6	10 or 20 in you, because we need your leadership
7	and really appreciate your guidance on all of this,
8	so thank you. Any other shout outs?
9	DR. TUCKER: It's an honor to work with
LO	all of you.
L1	MR. POWELL-PALM: Yes. Thank you.
L2	And this is the
L3	MR. GREENWOOD: One
L 4	MR. POWELL-PALM: Go ahead, I'm sorry.
L5	MR. GREENWOOD: Nate, just one
L 6	comment. Yes. No, just one comment for Jenny.
L7	I was so impressed the other day with all the
L 8	numbers that you remember of all the different
L 9	categories and for a while I was going to write
20	them down and see if you were making them up, but
21	apparently they're real. So that was very
22	impressive. I don't

1	DR. TUCKER: I have an amazing team
2	here and so I know I get to talk to you guys,
3	but, you know, the notes that I have all come from
4	an amazing team that makes me smarter every day.
5	So it is a privilege to work with them and that's
6	why I get up every day and coming here is why I
7	continue to work with organic. So thank you all.
8	Nate, your leadership during this meeting has been
9	fabulous, I'm really grateful. And I totally
LO	agree about how smart and talented this Board is.
L1	It's very humbling.
L2	MR. POWELL-PALM: Thank you,
L3	everybody, again. All right. So Rick, are we
L 4	ready for some crops?
L5	MR. GREENWOOD: We are and we have a
L 6	lot, I think there's 15 sunsets today, but we start
L7	off with two proposals. And the first one is the
L8	highly soluble nitrogen fertilizers, which seems
L 9	like we've been discussing for a long, long time,
20	started with Steve Ela working with Amy and then
21	Steve took off for some reason and left it with
22	Amy. So Amy, why don't you get started and then

we'll open it up for discussion.

Yes, no problem, Rick. 2 MS. BRUNCH: 3 Thank vou. And I do want to recognize Steve's efforts in making this proposal take shape. 4 also participated, bless his heart, in the comment 5 6 So post-Board service, he has been very vocal on just expressing how important organic --7 the organic industry is. So thank you, Steve, I'm 8 sure you're listening today. Anyway, I want to 9 separate this. This is a little bit complicated 10 11 as you could tell, the proposal wrote was pretty 12 extensive so I just want give some history, so everybody can come to speed pretty quickly on this 13 and then dive into some of the 14 stakeholder 15 comments.

So just as a recap, the vote at the fall NOSB meeting to prohibit ammonia extracts is an example of when a new material meeting organic definition of naturally derived enters the organic marketplace without a review process as to whether the material complies with OFPA or not. And this a little bit is in relation to what Kyla had

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mentioned, the differences between how substances
are handled in the crops livestock committees
versus handling. Today, this proposal, which is
actually a practice standard and not the
prohibition of a material is in response to the
Board and other stakeholders' concerns that this
new emerging category of non-synthetic highly
soluble nitrogen fertilizers that fall outside of
the definition of ammonia extracts will be
developed in the future, having no limits or
restrictions prior to being circulated and used.
So as a commenter stated last fall,
highly soluble nitrogen sources cannot be
addressed in a vacuum, we can't look at these
substances one at a time because actually there's
going to be a proliferation of them. So we must
take a broader approach to limit highly soluble
nitrogen sources as a whole and not substance by
substance. So the program history and precedence
dating back to when the final rule was approved
in 2000, the NOP agreed with the NOSE
recommendation and put specific regulation of

1	substances of higher solubility. The NOSB has
2	also set precedence with certain substances,
3	including sodium nitrate and others just with
4	prohibiting them or putting restrictions for use.
5	In 2009, the NOP advised vigilance in
6	the approval of all liquid fertilizer products and
7	then in '11 official guidance was used in relation
8	to nitrogen liquid fertilizers that had an analysis
9	of greater than three percent. And again,
10	yesterday we spent some time discussing the
11	handbook versus actual regulation. So today what
12	we're discussing, actually couldn't be anticipated
13	by OFPA. This is a very new emerging category.
14	So the rationale for the practice standard is
15	basically to prevent the widespread use of
16	non-synthetic, highly-soluble nitrogen sources,
17	while allowing for restricted use of these
18	materials in critical situations, which was an
19	important component vocalized by our farmer
20	stakeholders. One of those instances in
21	particular is actually abnormal weather. In
22	general, the comments from long-time organic

organizations, growers, and even a manufacturer 1 of natural sodium nitrate tended to be in favor 2 3 of limiting highly soluble nitrogen fertilizers based on organic principles of enhancing soil 4 biological processes. 5 So a few things that this proposal 6 7 clarified, because this sent back to was subcommittee last fall. So the clarifications 8 included the wording, we change nitrogen products 9 There was clarification 10 to nitrogen fertilizers. 11 to how fertilizer blends were calculated and why 12 that component, why that piece was important, clarification on the calculations. Many examples 13 were included. Several certifiers and farmers 14 15 mentioned that the calculations were clear. certifiers mentioned additional 16 that, with quidance from the NOP, this could be executed. 17 18 Clarification on placement. So the 19 proposal is indicating this practice standard he 20 placed at 205.105. Ultimately, the placement will be left up to the NOP, but the intent is that this 2.1

listing applies equally to all producers of food

crops, similar to the materials placed in 205.602 1 or 205.105. Through recent public comments, there 2 3 are four additional areas that I want to discuss before we wrap this up. 4 Relationship 5 to OFPA. As was 6 determined with ammonia extracts, the use of highly stable nitrogen fertilizers may not be compatible 7 with organic production. Many commenters noted 8 that the unrestricted use of HSN fertilizers runs 9 principles 10 counter organic outlined in to 11 regulations and pointed to environmental concerns, 12 while others say there's a need for more consistent research specifically on organic land. 13 The second one being OFPA versus OSP, 14 15 organic system plans. As a commenter mentioned, the NOSB should not restrict the ability of farmers 16 to develop the best organic system plan for their 17 18 site-specific conditions. And just as a reminder, 19 the individual's OSP, the organic system plan, defines how you remain in compliance with organic 20 standards. It doesn't set your organic standards. 2.1 22 Solubility versus 3:1. And this was

1	definitely in a concern in a topic that this
2	prop subcommittee spent a lot of time discussing.
3	And there were several public comments about
4	solubility versus 3:1. In general, for
5	solubility, finding a percentage above which a
6	limit is triggered is actually difficult to justify
7	and becomes difficult to test for. Using a C:N
8	ratio seems more complicated, but actually makes
9	setting a limit easier. Highly-soluble nitrogen
10	fertilizers contain mostly ammonia or nitrate
11	forms of nitrogen. These forms do not have carbon
12	associated with them and are immediately plant
13	available and fall below a 3:1 C:N ratio. Organic
14	products greater than 3:1 C:N ratio fit into the
15	category of materials that require soil biotic
16	transformation. To note, these protein and amino
17	acid structures cannot be billed if there are fewer
18	than three carbons to one nitrogen. The law return
19	was also mentioned quite a bit in public comments
20	and oral comments. The law return is important
21	and essential to the organic way of farming, but
22	organic farming as we've heard in other material

discussions, is not the industry's waste bin.

2 Rules and standards foster clear expectations and

are in place to protect the integrity of the organic

4 industry and define what can and cannot be

5 recycled.

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lastly, execution And and I do recognize that there were implementation. some comments made discussing additional burdens again, implementation. However, in crop advisor, some certifiers and farmers during oral comments said that the calculations were clear and resembled the steps taken for sodium nitrate. proposal indicates that certifiers or material review organizations could develop a list of unrestricted allowed materials that could you reference to avoid continuous analysis. certifiers comment stated, we request the details of the formulation of these products. If you don't receive the information of these products, we just Last week also Wood made a don't approve them. pretty impactful comment at our public comments,

1	just saying that bar for approval should be very
2	high. In conclusion, this is a practice standard
3	which is intended for all farms to prevent the
4	widespread use of new non-synthetic, highly
5	soluble nitrogen fertilizers, while also allowing
6	for restricted use of these materials in critical
7	situations expressed by farmers. I will leave you
8	with the words of one farmer. The intent and goals
9	of organic agriculture have helped to develop
10	agricultural systems that will provide food over
11	the long-term in ways that build our ecosystems,
12	not reduce them. Organic practices are not simply
13	a way of trying to maximize food production now,
14	but they are in place to maintain food production
15	over the long-term while building and protecting
16	the resources required to grow the food. That
17	commenter ends with please stop and take a step
18	back and think about what an organic system means
19	to use as you consider your vote. And with that,
20	I turn it over to Nate or sorry, maybe Rick.
21	MR. GREENWOOD: Yes. No, that's fine.
22	Again, Amy, thanks for a great overview. I really

1	appreciate that. So open it up to comments and
2	discussion from the Board.
3	MR. TURNER: I just wanted to ask the
4	question you know, there were some comments that
5	have indicated about the bookkeeping burden that's
6	created by this proposal, the farmer the burden
7	on the farmer and I just it was hard for me to
8	get my head around those comments and I just didn't
9	know if you had any thoughts on those or other folks
10	who might who have some direct connection to
11	those comments might be able to speak to that.
12	I mean, it didn't as we've deliberated as a
13	committee, it had not been an issue that I was
14	concerned about and then to hear several
15	commenters, either in verbal comments or written
16	comments kind of indicate that was an issue. I
17	wanted to just hear you speak to that, if you don't
18	mind.
19	
20	MS. BRUNCH: Yes, absolutely, Wood.
21	I'll start actually on that, and I would just invite
22	the other farmer members of our Board to weigh in

1	with their perspective as well. Yes, there was
2	a wide range of comments on that particular issue,
3	kind of indicating that every fertilizer will have
4	to be analyzed to, or every nitrogen fertilizer
5	will have to be analyzed to. Hey, we'll just check
6	a box and say we don't use this and away we go.
7	So, you know, in summary, really, this is geared
8	towards those fertilizers that farmers can see that
9	have that high nitrogen component to, and it's not
10	geared towards for as many where compost teas,
11	composts, those traditional sources of fertility
12	that organic farmers are using. This is geared
13	towards sodium nitrate and some of these new
14	complex lens that are coming down the pipeline.
15	So this is there were some farmer comments that
16	said this is pretty it resembles calculations
17	of sodium nitrates. And that is true. It can be
18	just very simple, where it does get a little bit
19	complicated is in these materials that are complex
20	formulations. So it's not just a sodium nitrate
21	product. It's a product that has several
22	components and in these components there are

1	substances of high solubility. That is where
2	there is a little bit of extra work to be done.
3	We'd need to deconstruct these materials into
4	their components and figure out what each component
5	contributes to the 3:1 ratio. If one is above a
6	3:1 ratio, then that's where the restriction comes
7	into play. So that's where the extra work does
8	happen. And, you know, for me and my farm, I don't
9	necessarily have to worry about that. I'm not
10	going to be using these materials and I speak mainly
11	on behalf of most the Midwest farmers. These are
12	cost prohibited for us to use. We have to be
13	resourceful, and use other ways, propagation,
14	manure applications, in order to economically
15	produce our organic crops. Others though, that
16	do need to use these, they will have to: one, know
17	what they're putting on their farms, and two, a
18	certifier is going to have to also understand what
19	is getting put onto these farms. So I don't want
20	to go I could go a little bit further into this,
21	but I wanted to open it up to the other farmers
22	real quick, and then we'll go back into the

1	questions. So
2	MR. GREENWOOD: Okay. Wood, you're
3	okay?
4	MR. TURNER: Yes. Rick, I had my thumb
5	up, yes.
6	MR. GREENWOOD: Okay. Yes, I couldn't
7	see you there. Okay. Nate?
8	MR. POWELL-PALM: Just jumping if I
9	might speak to Wood's question a little bit more.
10	Any burden realized from this will be on
11	certifiers. Certifiers to the material reviews,
12	this is not a farmer burden and full stop.
13	MS. GRAZNAK: As a farmer, whenever I
14	want to add a new product, and it doesn't matter
15	what it is, I submit that product request to my
16	certifier and they do the back end work to make
17	sure that it is able to be approved. So I don't
18	feel like it's going to be any extra work for me,
19	other than what I'm already doing, I guess, is what
20	I could say from my perspective.
21	MR. GREENWOOD: Okay. Thank you.
22	Allison?

1	MS. JOHNSON: Thank you. I just
2	wanted to kind of tease out one observation. I've
3	been working on this report on the benefits of
4	organic for several years, so it's hopefully
5	nearing it's finish, but I was looking back at
6	205.105 last night and I just wanted to highlight
7	that that's really where the core approach to
8	inputs and materials in organic lives, it's where
9	the big three prohibition is, it's where the
10	overarching prohibition on synthetics is, and the
11	rest of the connections to the national list. So
12	to me it's a big deal to add something to 105, but
13	I do think it's the appropriate place for this
14	because it's my understanding is this is a signal
15	that fundamentally we're not focusing on quick fix
16	inputs, we're emphasizing use of compost, and crop
17	rotation, and cover crops and all of the things
18	that build soil health over time and so this would
19	be added as a core principle.
20	MR. GREENWOOD: Okay. No, thank you.
21	Javier?

1	MR. ZAMORA: Morning, you all. I
2	think this is a little touchy subject as far as
3	organic growers. I'm thinking of the small
4	mid-size against the larger growers. I think
5	there was something said that it's not just the
6	nitrogen. I think there's it's not just the
7	nitrogen in the fish. I think there's a little
8	more beyond the nitrogen, that it's included in
9	this new way of getting nutrients or nitrogen in
10	this case. And I really think that there's some
11	really good certifiers that look at details on how
12	it's made and what's, you know, what the advantage
13	for different ways of growing crops is puts a burden
14	on them and it also makes it in a way more flexible
15	for the ones that might not be enforcing the rules
16	as good. Grower we see new products coming out
17	in the market that are always who are being told
18	that they're better. They help us grow things
19	faster and they will give us better yields,
20	sometimes not really knowing how those products
21	are made. So it could be sometimes misleading.
22	And I can tell you that, you know, the ratios

1	sometimes mean very little to us. We just want
2	to make sure it works. But we might be adding
3	something that it's is not going to be benefit
4	for the environment. So this is where we need,
5	you know Board members, a little more higher
6	educated than myself to really understand how these
7	nutrients, how this nitrogen, it's being created,
8	and how it's being utilized, that perhaps in the
9	future or even right now might be given a leg up
10	to the larger growers versus the small family
11	grower that might not really not that doesn't
12	have access to it, but it's not so available to
13	them. So we have to think a minute. So I think
14	there's just have a lot to talk about and listen
15	to everyone as we're doing. But I'm still a little
16	concerned about how this whole ratio will work and
17	what the burden would be on growers. I'm glad that
18	Nate saying that will be on the certifier, but
19	that's a concern that I have. I'm really, really
20	enforcing what we're hoping for here.

MR. GREENWOOD: No.

MR. ZAMORA: Thank you.

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1	MR. GREENWOOD: Thank you. No, sir.
2	I always good to get your perspective, Logan.
3	MS. PETREY: Okay. All right. I'm
4	not going to go on a big soapbox, I promise, but
5	I will go ahead and admit it, I was the one who
6	voted no on this. I think you all are probably
7	not very surprised. But anyway, because I was also
8	the sole one to vote for ammonia extracts and I
9	just want to make a quick statement. Just because
LO	a grower uses or has a need for high soluble
L1	nitrogen does not mean that cover crops and proper
12	rotations are not used. That seems to be a
13	misconception. It, you know, it may be cost
L 4	prohibitive for certain types of grower, but it
L5	just completely cost prohibitive for us to have
L 6	pale leafy greens that get harvested, rejected,
L7	that could cost like 20 grand an acre in crop loss.
L8	And so I actually am in favor of a 20 percent
L 9	regulation because I do believe in the holistic
20	system. I mean, we see it on our farm. And so
21	I'm in favor of that.

My hesitation for voting that in is

1	because of who decides who the crop needs are.
2	You know, the references that we have are from,
3	you know, universities that could be very behind
4	on organics. And it gets complicated that is it
5	the percentage of nitrogen or are they available,
6	you know, does all of it become available. I think
7	it is very complicated. We do it with sodium
8	nitrate already. And so, yes, my hesitation
9	started with who's going to tell me that that amount
10	is, but after talking with some Board members and
11	certifiers, it's going to be a negotiation with
12	the farmer and from what I understand. And it
13	currently is now. I haven't had any problems with
14	it with any inspectors. And but I will say in
15	the proposal it recommends that carrots are getting
16	100, 150 pounds of nitrogen and that's not what
17	we use. And so as long as it there is a
18	discussion with the grower and what are you trying
19	to obtain you know, it makes sense. You know and
20	so as long as you know that is accommodated, it's
21	fine. I agree with the 20 percent grow, everyone
22	agrees with the 20 percent, you know. And most

1 of the growers that even recommended the AE agreed with that 20 percent. So no, it's not as debatable 2 3 as the other, you know -- as the other, petition that we had. So I'm sorry to be long-winded, but 4 5 I do want to get that out that -- yes. We still 6 do use cover crops and we still use other things. 7 It's just -- it's a different farming system that requires something very quickly in -- and the crop 8 9 loss timing can happen within a few days and the release curve on some of these natural can take 10 11 two weeks depending on the temperature, you know, 12 even if the temperatures get to the appropriate So thank you for the time. 13 time. 14 MR. GREENWOOD: Okay. Thank you, 15 Logan. Kyla? 16 Thanks, Amv, for MS. SMITH: Yes. 17 your continued work on this. As Nate pointed out, 18 us certifiers will be probably the most impacted. 19 And I would just say that, you know, depending 20 on a particular type of operation, you know, and what you grow, you may or may not be impacted by 2.1 But as a certifier, we have to apply all 22 this.

1	of the parts of the regulations to all the
2	operations to figure out where the impact is and
3	so that's the burden that we carry. And I feel
4	like a lot of times, you know, with a lot of things
5	within certification, it does fall to the certifier
6	to implement and to enforce. And so because of
7	that, I'm always looking at what's the impact that
8	this is going to have, and is that impact worth
9	it? Because every time it seems to be like, oh,
10	well, this is going to fall like certifier has
11	to figure out certificates, acreage on
12	certificates, the certifier has to figure this out.
13	SOE, there's going to be tons of stuff for the
14	certifier for us as certifiers as to figure out.
15	So every time we're I just want for me, that's
16	my lens and that's what I'm constantly trying to
17	address is what's the impact to the you know,
18	to the organic industry as a whole and is that
19	impact is going to be worth it? The answer could
20	very well be, yes, absolutely but that's sort of
21	the seat that I'm sitting in.

And then I just have a very specific

question, and that is that, I saw in the public 1 comment a lot of confusion around whether or not 2 3 quano was a focus of this. And it seemed like to fall on both sides of the fence and so that's a 4 question that I've been getting from certifiers 5 and how specifically to evaluate that, and so I 6 7 didn't know if you guys could -- if anybody could speak to that. 8 9 MR. GREENWOOD: Okay. Yes. Thank 10 Just one comment. So I also live in a you. 11 regulated world from FDA with a medical device 12 company and there's always pain with regulations, but that's part of the cost of doing 13 So we complain and they throw new things 14 business. 15 on us and we have to hire more people to do regulatory affairs. But when you live in a 16 17 regulated world that's a reality. So, Nate, why 18 don't you go on and then we'll finish up with Amy 19 answering the questions. 20 MS. SMITH: Could I say one thing back to that, I totally agree with you. However, I do 21 22 think there's a lot of talk around keeping the cost

of certification low. And so that's sort of the 1 balance point about like we as certifiers need to 2 3 implement all of these additional things which will largely require new staff or more training and so 4 the costs of us doing business increase and then 5 6 the way that we can increase our 7 unfortunately, at this point is to pass that along to operators. And so there is just a balance point 8 9 there that we're all talking about already. 10 it's just a little bit tricky. 11 MR. GREENWOOD: Yes. No, I agree but 12 it does cost a lot more money every time somebody comes up with a great idea, it costs more money 13 there's no question about it and how you can pass 14 15 that on or not and maybe that's where NOP can come in, in terms of maybe more funding for all of us. 16 17 Anyhow, Nate, let's do that. 18 MR. POWELL-PALM: Thank you. I'm 19 going to kind of bridge a little bit between Javier 20 I think one thing certifiers do really and Kvla. well, and I say this from experience, is material 2.1 22 review. They spent a lot of money, a lot of time

1	really tackling the review of materials. So to
2	Javier's concern that some certifiers might
3	enforce this differently than others. The
4	consistency across certifiers is admirable and
5	it's where they put a lot of the resources and time.
6	So I would say that's not so much a concern that
7	I would share, but rather confidence that I have
8	that this gives good boundaries to certifiers to
9	be able to effectively manage this growing world
LO	of novel fertilizer products. In doing so, they
11	make more fair marketplace, but I do want to give
L2	just the greatest accolades to certifiers because
13	as Kyla said, this is a lot of work and I really
L 4	appreciate the certifiers that are eager to jump
L5	on this and willing to help us out.
L 6	MR. GREENWOOD: Okay. We have Amy and
L7	then Carolyn and then Brian, and then I think we
L 8	need to wrap this up and move on.
L 9	MS. BRUNCH: Actually, Rick, I'll just
20	defer to the end just in case Carolyn and Brian
21	have some additional questions.

MR. GREENWOOD: Okay. Carolyn?

1	DR. DIMITRI: Yes. My question is
2	actually for Logan. Logan, can you talk a little
3	bit more about, you know, the scenario that you
4	gave is, like, is that crop-specific or is it like
5	region-specific or is it depending on the weather?
6	MS. PETREY: Yes, I think all of the
7	it is specific to all of that, Carolyn, because
8	you'll have growers in very arid climates. And
9	that won't need a high soluble nitrogen rescue
10	treatment and that stated in the sodium nitrate
11	as, you know, in the discussion of it is that these
12	things happen. But in certain areas no, that
13	doesn't happen. And it doesn't happen with us
14	every season. So we don't use it in every planting
15	that we have. But the condition would be like a
16	spinach, which is a 40-day crop. And then two
17	weeks prior to harvest we get a four-inch rain.
18	And then a few days later you're going to start
19	to see it pale unless you respond immediately after
20	with a high soluble nitrogen, that it can
21	immediately take up. But if you were to apply an
22	organic fertilizer or an organic, you know, natural

1	fertilizer, you could be waiting 7, 10, 14 days
2	for that fertilizer to break down to become
3	available, and then to be uptaken by the plan.
4	And by then, you get pale and it's really hard to
5	bring a crop that's only 40 days old, you know,
6	in age to recover. The time frame is very crucial.
7	So that's just an example.
8	DR. DIMITRI: Can I just ask one
9	follow-up question? Thank you. That was really
10	helpful. So I think you told us yesterday or some
11	day that your company is moving its production
12	because of like climate concerns. So could we draw
13	the conclusion that as we see climate change
14	affecting agricultural more seriously over the
15	next coming decades, that the use of something like
16	this might become more important as producers start
17	shifting what they're growing and maybe the regions
18	that they're growing. It's a speculative
19	question, I know, but
20	MS. PETREY: It is, it is, but I've been
21	to multiple conferences and produce, you know where
22	there's a lot of California western companies that

Τ	need or think long-term, now are we going to get
2	to the east coast? It's just a harder area to grow
3	a certain things and not many have succeeded, you
4	know, I bet a lot of them have failed just because
5	the prices have to be different. So yes, I would
6	say logistically, you know, dealing with the
7	freight issues that we already have and then with
8	the water restrictions, I know our companies, you
9	know, everybody's in water restrictions. I know
10	Rick can speak on that, so I would say yes.
11	DR. DIMITRI: Thank you, Logan.
12	MS. PETREY: Thank you.
13	MR. GREENWOOD: I have Brian and then
14	Mindee and then Amy.
15	MR. CALDWELL: I think this is for Amy.
16	There were a few comments that were specifically
17	focused on the the wording of the motion. And it
18	says these materials are three with the C:N ratio
19	of 3:1 or less are limited unless use is restricted
20	to a cumulative total of 20 percent of crop needs.
21	But I think what is actually meant to be said
22	there, they are, restricted to a cumulative total

of use of 20 percent of crop needs, and this whole 1 little phrase there are limited unless use is 2 3 restricted. It's a little bit redundant and a little bit confusing because you know, it says 4 they're limited, but it really means that you can't 5 do it unless the cumulative -- you can't use them 6 for more than a cumulative total of 20 percent of 7 crop needs. Do you see what I'm saying here? 8 That the wording is a little clumsy and I'm wondering 9 if we can fix that in the cover letter or just make 10 11 it very clear that -- exactly what the meaning of 12 that is there. Okay, thank you. 13 MR. GREENWOOD: And I'll let Amy respond, but, Mindee? 14 15 MS. JEFFERY: Go ahead, Amy. 16 MS. BRUNCH: Oh, okay. Ι specifically to Brian, yes, I did actually see that 17 18 as well with some commenters and my opinion and 19 that can be confirmed by anybody in this call is 20 that, you know, we -- the intent of the motion is there to make it a little bit more clear on a 2.1 22 non-substinent change I think is definitely in our

1	purview, but the intent is that they would be
2	restricted or, sorry, prohibited and then
3	restricted to a cumulative total of 20 percent of
4	crop needs.
5	MR. GREENWOOD: Great, thanks. Yes.
6	Okay. Mindee and then Dilip.
7	MS. JEFFERY: Thank you. I really
8	appreciate all the work and all the sides and all
9	the depth of thinking that we have to go through
10	and work like this. And I just wanted to say that
11	I see this proposal as functional compromise. And
12	organic farmers are conducting the symphony of the
13	soil, and that's what we want. And I really see
14	us as being on the yellow brick road with this
15	proposal.
16	MR. GREENWOOD: Okay. Thank you.
17	And then Dilip, and then back to Amy to sort of
18	wrap this up.
19	DR. NANDWANI: Okay. This is a very
20	fascinating discussion for me. And it can go on
21	and on, but I have a just a comment, not a question,
22	what has been said, and probably it goes to the

roots of our principles of organic agriculture. 1 So if the higher nitrogen source coming from 2 3 off-farm input, you have to look at that to keep that in mind. And if it is really low, like Logan 4 said that, and then if we provide then plants will 5 have to wait for a lot of days. 6 And by the time 7 the nitrogen is received, they may not perform accordingly. So I'm just wanted to say that the 8 principle using the on-farm input, it's, where we 9 are looking into that and the balance between the 10 11 quantity, low versus high. That's the important 12 point to keep in mind. That's all I wanted to 13 comment. Thank you. 14 MR. GREENWOOD: Thank you. So, Amy do 15 you want to wrap this up? And then I guess we go 16 for a vote. 17 MS. BRUNCH: Yes, absolutely, Rick. 18 And I appreciate the comments. Also, just the 19 diverse panel of farmers that we have here. Kyla's 20 comments that represent certifier's point of view. I think this was really helpful discussion, Dilip, 2.1 Just kind of in 22 and Brian, as well, and Mindee.

general, I think that was a great term that Mindee 1 had mentioned kind of a functional compromise. 2 3 I've had the ability to farm not only in Nebraska, but in the US, in Florida -- South Florida, Texas, 4 5 and there Ι mean regionally, there 6 experiences that happen that isn't a one-to-one comparison for farmers. 7 That's why I think that this is important we recognized that, the community 8 recognizes that. And kind of as Logan mentioned, 9 you know, this is -- it points to a comprehensive 10 11 and then supplementation when system 12 environmental moments do occur to regulate the usage of these particular items. 13 So I think that the intend to the motion 14 15 is very clear. I really strongly want everybody to think about right now, doing nothing, these are 16 These are considered non-synthetic 17 unregulated. 18 substances that can be used with unlimited amounts. 19 So what we need to do and think about is putting 20 these quardrails to offer more clarity in the situation. I know that maybe this isn't 100 2.1 22 percent perfect in terms of clarity, but, right

now, again, there is just no rules, no regulation, and it is up to the interpretation of certifiers. So this at least gives some reference to what can be allowed, what's prohibited, and then what's restricted.

In terms of materials, there's a great chart that was put into the proposal. And there's a delineation, really, of substances that are above the 3:1 and below. Sodium nitrate and quano, Kyla, that was part of your question. Guano is right on the edge, and that one is probably the greatest of all materials that are currently in circulation. Everything else is clear and guidance can be So this re-analyzation every year these substances does not need to take place. So really looking at MROs to be able to provide that again, this is to quidance. But put boundaries on materials that are unregulated And I think this is really no different currently. than what we've done with excluded methods yesterday. And also our approach to bio-waste films that we've done in the past as well. So with

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1	that, in the interest of time, I'll turn it back
2	over to Rick.
3	MR. GREENWOOD: Okay. And I guess
4	what we need to do, Nate, is call for a vote on
5	this.
6	MR. POWELL-PALM: Yes.
7	MR. GREENWOOD: Okay.
8	MR. POWELL-PALM: So we have a motion.
9	Motioned by Amy Brooke, seconded by Brian
10	Caldwell. And we are going to start the voting
11	with Liz Graznak.
12	MS. GRAZNAK: Yes.
13	MR. POWELL-PALM: Kim Huseman?
14	MS. HUSEMAN: Yes.
15	MR. POWELL-PALM: Mindee Jeffery?
16	MS. JEFFERY: Yes.
17	MR. POWELL-PALM: Allison Johnson?
18	MS. JOHNSON: Yes.
19	MR. POWELL-PALM: Dilip Nandwani?
20	DR. NANDWANI: Yes.
21	MR. POWELL-PALM: Logan Petrey?
22	MS. PETREY: Yes.

1	MR. POWELL-PALM: Kyla Smith?
2	MS. SMITH: Yes.
3	MR. POWELL-PALM: Wood Turner?
4	MR. TURNER: Yes.
5	MR. POWELL-PALM: Javier Zamora?
6	MR. ZAMORA: Yes.
7	MR. POWELL-PALM: Amy Bruch?
8	MS. BRUNCH: Yes.
9	MR. POWELL-PALM: Brian Caldwell?
10	MR. CALDWELL: Yes.
11	MR. POWELL-PALM: Jerry D'Amore?
12	MR. D'AMORE: Yes.
13	MR. POWELL-PALM: Carolyn Dimitri?
14	DR. DIMITRI: Yes.
15	MR. POWELL-PALM: Rick Greenwood?
16	MR. GREENWOOD: Yes.
17	MR. POWELL-PALM: And with great
18	gratitude to certifiers, the chair votes yes.
19	MS. BRUNCH: That's 15 yes, 0 no, 0
20	abstain, recuse, or absent. The motion passes.
21	MR. GREENWOOD: Okay. Thank you,
22	everyone. So we'll go on next to Logan Petrey on

the proposal for carbon dioxide, which is petitioned.

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MS. PETREY: Thank you, Rick. All 4 So carbon dioxide then it was being 5 Okay. received a petition, requesting, is it synthetic 6 carbon dioxide at 205.601 allowed for the use at 7 (a) which is an algicide, disinfectant, sanitizer. 8 9 And (j) as plant or soil amendments. Carbon dioxide is understood to be a material with 10 11 inherently low risk and is also approved as a 12 processing aid. Okay. And soils with -- so the use of it in soils with high pH, applying water 13 increase 14 with а reduced рΗ can nutrient 15 availability and increased plant health. Additionally, the activity of carbon dioxide and 16 water can help prevent clogging of irrigation 17 18 systems by algae and other plant contaminants. 19 The water pH adjustment can be manually control as well as automatically controlled, by adding a 20 2.1 pH probe and controller that adjust the CO2 22 injection to maintain target рΗ values.

1	Alternative uses with mentioned were sulfur
2	burners and citric acid because water pH cannot
3	drop below 5.0 when carbon dioxide is used as an
4	acidifier. This method may be considered more
5	secure as a pH adjustment compared to alternatives.
6	Which we did see, the some commenters orally
7	and on the written comments suggest that as well.
8	Carbon dioxide is prepared as a
9	byproduct of manufacturing of lime during the
LO	burning of limestone, combustion of carbonaceous
L1	materials, also from fermenting processes which
L2	would be this, you know, where we would get some
L3	non-synthetic sources. And so the question has
L 4	also been: Why don't we used non-synthetic sources?
L 5	Some of the commenters were great to mention that
L 6	the infrastructure to support logistically and
L 7	storing that carbon dioxide is not available. And
L 8	so therefore, the necessity of synthetic is there.
L 9	And we also see that with the handling of carbon
20	dioxide material.
21	Other comments, one commenter was
22	completely against the addition but also you

1	know, was questioning the need of irrigation too.
2	So so I do think, you know, when we are using
3	irrigation, you know, we are, you know, in need
4	of but and then three commenters where against
5	the addition without the annotation or without an
6	annotation demanding that the material be
7	manufactured strictly from a byproduct. Kind of
8	similar to what, you know, I have squid byproducts.
9	So that was a recommended annotation. And then
10	five commenters were in support of this material
11	as stated. One commenter, QCS was in support was
12	material however stated strong concern for the
13	lacking discussion of carbon dioxide at 205.601(j)
14	as a plant or sole amendment in the proposal and
15	a petition recommending that the proposal be sent
16	to subcommittee, which I know that's been some of
17	the concerns and some of the comments, questions,
18	and Board members. Are there any other comments?
19	MR. GREENWOOD: Comments? Yes,
20	Brian.
21	MR. CALDWELL: Yes. I guess I agree
22	with some of the comments that said that the use

1	for carbon dioxide as an algicide or sanitizer was
2	really well covered and I think it's done very
3	seems like a positive decision there, but the
4	how it could be used as a plant or soil amendment
5	is really unclear. And so if we pass this as is,
6	we're going to it seems like we're going to be
7	passing the (j) part of it as the plant or soil
8	amendment and without any discussion. And I'm
9	uncomfortable with that.
10	MR. GREENWOOD: Thank you. And, Nate.
11	MR. POWELL-PALM: I just wanted to give
12	a big shout out to Logan who took on a proposal
13	very early on in her NOSB career and has just slayed
14	it.
15	MS. PETREY: Well, I wouldn't say that.
16	MR. POWELL-PALM: I think you have.
17	MS. PETREY: That's for new members.
18	MR. POWELL-PALM: The rest of the Board
19	and so I don't I wanted to just recognize that
20	it's a lot of work. And you've been stellar, so
21	thank you for all you put into this.
22	MS. PETREY: Yes. Thank you, Nate.

1	MR. GREENWOOD: Dilip?
2	DR. NANDWANI: This is a good work,
3	Logan. And I just have a quick clarification, if
4	you may. You are talking about the solid, as well
5	as the liquid sorry, the gaseous form of the
6	carbon dioxide, correct?
7	MS. PETREY: Yes.
8	DR. NANDWANI: Thank you.
9	MR. GREENWOOD: Mindee?
10	MS. JEFFERY: Thank you. Good work,
11	Logan. I really appreciate you and all your
12	dialogue as a Board member and I feel similarly
13	about (j) wanting a little bit more depth of
14	understanding there. And if we do end up doing
15	more work on this, I might just need help
16	understanding what it means on the natural uses
17	because it will help me understand the specific
18	need on the synthetic uses. And so if I miss
19	something there, I apologize, but if we do go back
20	to work on this, that would be some information
21	I would love to know more about.
22	MR. GREENWOOD: Kim, did I see your

1	hand up or
2	MS. HUSEMAN: You did, but then I
3	lowered it. I'm getting the impression that
4	there's and I have the reading through the
5	comments as we're going through just had had
6	similar concern as used as a plant or soil amendment
7	and how that's incorporated. So I know this is
8	about the subcommittee item.
9	MR. GREENWOOD: Yes. Well, that's
10	what I was going to suggest because we have
11	people are concerned about (j) as a plant or soil
12	amendment. So what I'd like to do is basically
13	call for a vote to see if we want to bring it back
14	to subcommittee and get some clarity for that
15	before we vote on the petition.
16	MS. HUSEMAN: I second that motion.
17	MR. POWELL-PALM: Okay. So Rick
18	motions to send this back to subcommittee, seconded
19	by Kim. All right so in the vote to send back to
20	subcommittee, we're going to start with Kim for
21	the first.

MS. SMITH: Nate, Sorry.

1	MR. POWELL-PALM: Sorry. Go ahead.
2	MS. SMITH: Is there any more
3	discussion?
4	MR. POWELL-PALM: Every time I will
5	give this right.
6	MS. SMITH: That's okay. I'm going to
7	be the Robert rules
8	MR. POWELL-PALM: I appreciate you.
9	MS. SMITH: and not be, since I've
10	been charged of the vote counting the vote.
11	I just had a quick clarification in that we're
12	sending the whole thing to vote. The motion is
13	to send the whole thing back; is that's correct?
14	MS. PETREY: From what I understand,
15	they won't pass anything through without it
16	grouped. So that's the only reason why I don't
17	want to a hold it up. But from my understanding,
18	it needs the entire thing.
19	MS. SMITH: Okay. I just wanted to
20	clarify the motion on the table. Thank you.
21	MR. GREENWOOD: Okay. So I guess
22	we're ready to vote then.

1	MR. POWELL-PALM: All	right.
2	Starting out with Kim.	
3	MS. HUSEMAN: To move this	back to
4	subcommittee, my vote is yes.	
5	MR. POWELL-PALM: Thank you.	Mindee?
6	MS. JEFFERY: Yes.	
7	MR. POWELL-PALM: Allison?	
8	MS. JOHNSON: Yes.	
9	MR. POWELL-PALM: Dilip?	
10	DR. NANDWANI: Yes.	
11	MR. POWELL-PALM: Logan?	
12	MS. PETREY: Yes.	
13	MR. POWELL-PALM: Kyla?	
14	MS. SMITH: Yes.	
15	MR. POWELL-PALM: Wood?	
16	MR. TURNER: Yes.	
17	MR. POWELL-PALM: Javier?	
18	MR. ZAMORA: Yes.	
19	MR. POWELL-PALM: Amy?	
20	MS. BRUNCH: Yes.	
21	MR. POWELL-PALM: Brian?	
22	MR. CALDWELL: Yes.	

1	MR. POWELL-PALM: Jerry?
2	MR. D'AMORE: Yes.
3	MR. POWELL-PALM: Carolyn?
4	DR. DIMITRI: Yes.
5	MR. POWELL-PALM: Rick?
6	MR. GREENWOOD: Yes.
7	MR. POWELL-PALM: Liz?
8	MS. GRAZNAK: Yes.
9	MR. POWELL-PALM: And the Chair votes
10	yes.
11	MS. PETREY: That is 15 yes, 0 no, 0
12	abstain, recuse, or absent. The motion passes.
13	MR. GREENWOOD: Okay. Now we're on to
14	15 sunsets, for review for the crop committee.
15	The first one is soap-based herbicides, and that's
16	actually mine. Soap-based herbicides have been
17	around for a long time, they're reasonably popular,
18	although sometimes I wonder how effective they are,
19	having used them myself. Written comments
20	actually were positive for keeping it on. No one
21	is particularly against them. They're basically
22	just a fatty acid that has been saponified, turned

general 1 into soap. There's agreement internationally, they're on the list, and they 2 3 turnover very quickly in the environment. there really aren't any environmental concerns for 4 them, it's just, you know, another use of something 5 So I'll just stop there and 6 that's fairly benign. 7 see if there's any questions about herbicides, Seeing none. I'll go on to 8 soap-based. Okay. 9 Logan and biodegradable, bio-based mulch films, which we seem to talk about all the time. 10 11 MS. PETREY: We sure do. Okav. So 12 I'll pick this up from Ace's. There was a hot topic 13 of new Board members last year, because the annotation was changed to the 80 percent and we 14 15 voted yes on that. That was yes for ten and I have four nos on that record. I don't know if that was 16 right, somebody abstained. Anyways -- and so --17 18 did we only have 14 members, but -- I'm getting 19 So biodegradable bio-based off track. Okay. 20 mulch film is used to suppress weeds, conserve water, and facilitate production of row crops. 2.1 22 Past commenters have acknowledged that there are

Ι	currently very lew options other than
2	difficult-to-use paper mulch for the 100 percent
3	bio-based BBMF, but have generally felt this
4	listing should remain despite that there's no 100
5	percent. However, at the fall of 2021, we voted
6	to allow 80 percent because there are some on the
7	brink to be allowed. And so this use is going to
8	be to help, you know, with the incredible amount
9	of plastic that is used and thrown in the landfills.
LO	And this is one of those that is a compromise.
L1	And although there is concern of what is
12	lingering, you got 20 percent there, we're hoping
L3	that innovation really takes over in the
L 4	marketplace and people will want, you know, to get
L 5	closer to that 100 percent. But the question was,
L 6	is there any new information on the availability
L7	of 100 percent and through the commenters there's
L 8	been none available. So thank you, Rick.
L 9	MR. GREENWOOD: Thank you. Any
20	comments, discussion about that? So do we say,
21	we've talked about bio-based mulch seems like, or
22	at least for me for about the last five years, but

1 anything -- I think this one now is fairly straightforward 2 since we've had the other 3 discussions. Okay. Seeing none, we'll go onto boric acid and that's Wood. 4 MR. TURNER: Thanks, Rick. 5 We have a 205.601(e) 6 listing at for boric acid as 7 insecticide, including a keracide or mite control. And also, include the boric -- I think it's also 8 9 for structural pest control, with no direct contact This is material that we had 10 with food or crops. 11 heard from many, many in the community about in 12 terms of it's -- the -- it's a necessity, I think 13 in controlling ants and roaches in particular. You know, it's been -- there's been healthy debate 14 15 on it over the years in terms of the fact that it's a material that you know, it's not entirely benign, 16 although generally regarded as safe, but it is, 17 18 something that -- there are -- it is considered 19 to be preferable to other alternatives for these 20 kinds of uses. There was, again, general support as there has been over the years for maintaining 2.1 22 the material -- maintaining access to the material.

There was one statement of opposition and then 1 2 I thought, compelling comment about one, 3 potentially looking at the material annotated to clarify the use of it to avoid, let's see, to focus 4 on the use of it as a gel, not in other formulations. 5 6 So it may be worth looking at that in subcommittee 7 in more detail. The suggestion around the gel usage was potentially in the context of a limited 8 9 TR. That's all I have. 10 MR. GREENWOOD: Okay. Thank you. 11 Any questions, comments about boric acid? 12 Seeing none we'll move on to Mindee again, sticky traps and barriers. This is 205.601(e) as an 13 insecticide basically it's used in pest control 14 15 and monitoring. And also used with traps as of Doesn't come into contact with 16 production age. 17 food so it's used in limited quantities and 18 sometimes on tree trunks. The listing covers a 19 wide range of traps and coatings. But there is 20 some of the sticky traps do have petroleum wax, but overall, again, a very benign compound or I 2.1 22 guess you can call it a compound. And generally positive comments on the written comments. So I

will stop there, see if there's any comments from

our group. Okay. Seeing none we'll go to

elemental sulfur and that's to Brian.

MR. CALDWELL: Okay, well, this might take a few more minutes, I don't know. situation with sulfur, once again, it is used very, in a lot of different applications within organic And this at 205.61(h) was a new agriculture. addition in 2019 as slug or snail bait. And the -- in terms of the comments, basically, there were five comments in favor of relisting, one against, and one that said more review was needed, and a couple of them said that even though it wasn't widely used according to some of the surveys that some of the certifiers did. Since it was only available since 2019, we need more time to see if it -- if the grower community will actually take up, use this product more. The somewhat confusing or somewhat tricky issue comes in with the inert ingredients. And these products are made with basically 99 percent inerts and it kind of just

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once again raises the importance of us being able to deal with inerts in these formulations.

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And the reason it's so important here 4 is that the sulfur use seems to be very safe and 5 6 have very little environmental impact. And there 7 is another product that uses ferric phosphate for the same purpose as a slug bait. But what has been 8 -- what has come up is that the inerts -- that one 9 of the inerts that's used with that is a EDTA 10 11 chelator, which is on the old list four, so it was 12 -- it's sort of de facto in use and approved, but it makes the the ferric phosphate toxic to dogs. 13 And I think there have been some issues where dogs, 14 you know, gotten sick and I don't know if they've 15 But anyways, it has been an issue that was 16 brought up. And in fact the history of this is 17 18 that the ferret phosphate product was brought up 19 for a relisting under the sunset reviewing and 20 almost voted down, but it was felt there was no alternative to to ferric phosphate. 2.1 And since Notta (phonetic) was becoming more important in 22

1	organic and that tends to lead to more slugs and
2	snails we wanted a product. But anyways, to make
3	a long story short now, with this sulfur-based
4	product for slug management, there is an
5	alternative to ferric phosphate, and so it may
6	change that whole situation. But the fact that
7	99 percent of the ingredients in these sulfur-based
8	or ferric phosphate-based products, 99 percent are
9	inerts. And in the ferric phosphate, the inert
10	has the interaction with the inert and the active
11	ingredient has made the product toxic to dogs.
12	These are important issues and it is totally
13	unknown what the 99 percent inerts are in the
14	commercial elemental sulfur slug baits.
15	Evidently according to the MSDS, some of them do
16	contain iron, but we don't know if it contains EDTA.
17	It's just filling a little bit of 99 percent black
18	box. So just to sum up very quickly, I sorry, I've
19	taken so long about this, but as usual, seems like
20	the more you delve in the more difficult it gets.
21	But the actual elemental sulfur active ingredient
22	in these products seems very benign and safe and

1	has low environmental impact. But we are once
2	again commended to really do something about our
3	inert situation. So that's kind of a side issue.
4	That's really not the focus of this elemental
5	sulfur, but it just brings it up very clearly.
6	MR. GREENWOOD: No. Thanks, Brian.
7	We went through the same thing. I don't know if
8	you were on the Board with the other snail bates
9	and iron and the whole area as you know we struggled
10	with is inert because they're not inert and that
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12	MR. CALDWELL: Right.
13	MR. GREENWOOD: they were misnamed
14	at the very beginning, but we are, you know, we're
15	to look at the key ingredient, which is either the
16	iron or the sulfur. And so that's how we evaluate
17	these. But obviously more work needs to be done.
18	So any questions or comments for Brian? Okay.
19	I'm seeing none. We'll go to Jerry, and he's
20	obviously Mr. Copper and he has copper, fixed and
21	then copper sulfate. So, Jerry.
22	MR. D'AMORE: And with your

permission, I'm going to do, both of these at the 1 We're not voting on them. Obviously, 2 same time. 3 I won't get away with that next --MR. GREENWOOD: No, I think that's fine. 4 D'AMORE: you. 5 MR. Thank So the 6 205.601, copper sulfate, coppers, fixed both as 7 plant disease control. At the spring session, I will review the two materials together as they are 8 both plant disease control and they share the same 9 They also share the same 1995 TAP and 10 annotation. 11 the same 2011 TR. Further, our stakeholder 12 questions for these two sunsets are exactly the 13 same. Lastly, I presented copper sulfate at the fall of 2021 Board meeting for two distinct uses 14 15 in aquatic rice systems and they were given another five years and I'll try to make that relevant in 16 17 a minute. 18 The next part is something I wrote over 19 the weekend, and I think has become a little bit 20 more apropos in the last couple of days, and actually this morning as well. During the 2021 2.1

sunset process, there was a relatively small, but

very persistent stakeholder group that expressed 1 the opinion that we the NOSB was rubber stamping 2 3 the coppers through the process and giving little space to continuous improvement and/or innovation. 4 The 2021 research priorities proposal that was 5 6 presented at the October 2021 Board meeting was 7 helpful to show NOSB concern. There were four bullet points I'd like to highlight. 8 9 comprehensive Number one, systems 10 based approach for managing individual crops in 11 a way that decreases the need for copper-based 12 materials, including research, crop rotations, sanitation practices, plant spacing, and other 13 factors that influence disease. 14 Number two, 15 breeding plants that are resistant to diseases that Three, developing alternative 16 copper controls. 17 formulations from materials containing copper, so 18 that the amount developmental coppers is reduced. 19 And four, developing biological agents that work 20 on the same diseases, coppers now used on. Continuing, we have asked for a new TR 21 22 for these two sunset, which should be delivered

1	this June and thus available for our consideration
2	during the sunset period. The lead paragraph to
3	the four-page request for TR reads as follows: The
4	review of the 2011 technical report on copper
5	sulfate and other copper products highlighted five
6	areas that should be expanded on an updated with
7	the latest research. Number one, human health
8	concerns, soil health and microbiota, application
9	rates and accumulations in the soil, copper in the
10	aquatic environment, and alternatives to
11	copper-base products. In response to the two
12	copper sunset documents presented a day, there were
13	30 stakeholder comments with the overwhelming
14	majority being written. This is the last thing
15	I'll say and I'll say it very carefully. There
16	was not one comment, written or oral that I could
17	find that advocated for removing coppers during
18	the review process. To be clear, there were quite
19	a few that would like to see this material phased
20	out over a longer period of time, but not a single
21	one advocating its removal this go around. So I'll
22	leave it there. Thank you.

MR. GREENWOOD: Thanks, Jerry. And I think that's, you know, we see copper in a lot of other compounds, where we don't really want to use them. But until we get alternatives we're sort of stuck with them. So any comments for Jerry about copper, we've discussed copper quite a bit as you know. Okay. Javier?

Yes, copper is one of MR. ZAMORA: those things that growers need specially that cranberry, the apple growers, and some other And I'm in an array of usage in that, but people. I think it's a tool that we need, but I think we need to think of the future because the remnants of it is in the soil, I mean, it's copper. think as a Board we have to think of that, and I just keep pushing it for newer Board members or new generations to deal with it. I think, you know, I can only think of the metal bromide how it has been, you know, as new products come out for people that need it are developing substances of new gases that could potentially help those growers. But copper is, it's -- we got to

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think about the future. So just keep it in our 2 minds and do something about it. 3 MR. GREENWOOD: No. You're absolutely right. And I think that's part of why 4 we asked for the new TR and for the research, one 5 6 of the research priorities. Okay. Yes. Thanks, So we now have polyoxin D zinc, and that's 7 Javier. Brian again. 8 9 MR. CALDWELL: Thanks, Rick. Polyoxin D zinc salt is a synthetic, but it is based 10 on a natural substance from soil microorganisms. 11 12 But the zinc is added to it to prevent it from leeching and make it more effective in its use as 13 a fungicide. And in terms of the comments, I 14 15 counted 11 for re-lifting, one against, and another overwhelming 16 one urging more review. The 17 statements for -- from the growers, in the grower 18 groups was that it's effective. And that's 19 important because just as -- we just talked about 20 copper and products like this, which are basically origin, sometimes needing 2.1 of natural some 22 tweaking, like the zinc salt, part of this one,

but they're becoming more and more common. And there's a lot of research going on with them. And they really do have the potential over the long run to reduce the amount of copper that is used in vegetable and fruit production. So that's very a positive thing. The growers are really wanted to keep it for sure on the list.

Now there were some questions that we put out there to the community. And the first one was: Is there concern that cross-resistance to polyoxin D, with some potential human health products. Is that a concern? And we didn't get much response about that. A couple -- in a couple of places, they said, well cross-resistance to products that currently do not exist, is not an issue, but if new closely-related products are started to be used for human health, then it becomes So currently it's not an issue, but it an issue. might be in the future. But for now, we don't need to be concerned about that. So essentially, I would say that the kind of -- the responses that we got were that it's a benign substance and it's

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very effective. And so that's pretty much the summary, I believe, of the comments.

One thing that I did want to mention, one comment talked about a study that showed chromosomal aberrations in hamster cells. And that made me take a second look, but I looked at the primary source on that and actually, it was a study that was cited in EPA document saying that polyoxin should be exempted from residue tolerance and that they had found many -- several other studies that contradicted that. So that, you know, it sounded like something to be a little bit concerned about, but then evidently according to the EPA and these other studies, not. So I think I'll just leave it with that and we -- I just wanted to say that we will welcome more comments on this from the wider organic community. It does seem to be a very promising pest control material that we want to just do the right thing and do it right. So thanks.

MR. GREENWOOD: Thanks, Brian.

Thanks for the deep dive into the literature. So

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I see Logan has a question?

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MS. PETREY: I have a comment.

3 MR. GREENWOOD: Okay.

I use polyoxin D, it is MS. PETREY: a great material. And just to talk about the copper reduction, probably used 80 percent less copper per sprays, because of this material, and it is more -- it is targeted towards fungicides which copper typically is for bacterial diseases but we also use it for fungicides too because there just aren't many things that do work. But polyoxin D really takes it away as using copper for a fungicide and more for bacteria side because polyoxin D doesn't have efficacy. I think it works on a heightened degradation, so when we found that, we really helped the health of the farm because it is specific to the fungicides and it's not killing the natural bacteria that we actually want on the leaf to populate it so that we are more resistant to infection. Also it's not phytotoxic or I haven't seen any phytotoxicity, whereas when we use copper consistently, we will see a tinge

or some kind of burn that you might get with some 1 copper. So I'm huge -- greatly supporting this 2 3 Thank you for the review, it's really good and extensive. 4 MR. GREENWOOD: Thanks, Logan. It's 5 always great to have somebody on the Board that 6 7 uses one of these products so you can give us a Any other questions on polyoxin D 8 real data. 9 before we go on? Okay. Seeing none, we go to Amy and humic acids. 10 11 12 MS. BRUNCH: Okay. Thank you, Rick. Humic acid, so this is a synthetic substance 13 allowed for use in organic production. 14 15 we're looking at here is naturally occurring deposit water and alkalide extracts only. 16 17 use of these they can be soil applied or full year 18 applied depending on the specific product and humic 19 acid really affects the soil fertility by making

micronutrients more readily available to plants,

than contributing actual nutrients to the soil.

catalyst.

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pretty

There's

1	widespread use amongst stakeholders in the
2	community of this substance. One thing to
3	highlight through environmental issues, you know,
4	this particular substance in general isn't known
5	to cause environmental issues, however, there were
6	a couple of commenters that cited concerns just
7	on the mining manufacturing process in the disposal
8	of this extractant. There was a lot of comments
9	in favor, again, of this substance. Majority of
10	the commenters stated that this does provide
11	benefits to their farms, indicates a widespread
12	use because one certifier in particular said 718
13	members have humic acids on their OSP. It also
14	helps some of those lighters soils. And just
15	beefing nutritional benefit. OMRI also states
16	there's 251 products registered with humic acid.
17	However, the TR indicates that there's a lack of
18	standard analysis for the substances marketed as
19	humic acid. So you can see that in the comments,
20	some folks said that these didn't provide any
21	benefit. But again, the majority of people said
22	they did provide benefit to their farms and fields.

1	One additional thing to bring up to
2	light, and I thought this was really interesting.
3	This is looking at the actual extractant itself
4	because there is not a limit on the what type
5	of extraction used except for it does say let's
6	say alkaline. Potassium hydroxide is the most
7	commonly used extractant. And as OMRI indicated,
8	there is an assessment that can be done to see if
9	potassium hydroxide has been fortified. But other
10	extractants don't necessarily have framework for
11	assessments. So looking at that fortification
12	piece of synthetic extractions is really
13	important. And that was something that we can also
14	take back to subcommittee to discuss on the
15	particular extractant. The two most recent
16	reviews, though the NOSB found humic acids to be
17	compliant with OFPA and this is been part of our
18	sunset process for quite awhile.
19	MR. GREENWOOD: Okay. Thank you, Amy.
20	Any questions? Yes, Javier?
21	MR. ZAMORA: Amy or any Board member,
22	can you guys share a little bit about what would

1	be the difference between the humic acid's usage
2	as what Logan, (j) on carbon dioxide was talked
3	presented because it seems like both they
4	do they enhance the nutrients available to
5	plants in soil. But can somebody talk a little
6	bit about that? I mean, it seems like
7	MS. PETREY: Well, we
8	MR. ZAMORA: I don't know. I had
9	another question about that.
10	MS. PETREY: More of when we request
11	more information about CO2 being a plant and soil
12	amendment. So stay tuned unless Amy, you know,
13	and if you know, I'm going to be a little upset
14	here that we didn't. I'm kidding.
15	MR. GREENWOOD: Okay. Thanks, Logan.
16	Amy, anything to add?
17	MS. BRUNCH: No. Sure. Yes. I'm
18	just I'm readily awaiting your deep dive on that,
19	Logan, in particular to the soil. But in terms
20	of this product, Javier, this is, a little bit
21	different. This isn't necessarily a gas. It's
22	an actual physical substance and mainly applied

Τ	liquid but can be applied in a soil dry form. This
2	would just, you know, the comments associated with
3	it say you can reduce your nitrogen fertilizer,
4	removes toxins from the soil, it acts, you know,
5	as a catalyst to make the nutrients that are in
6	the soil more available and then it works on your
7	soil structure over all. So you know, that's a
8	good question. I think this isn't in particular
9	a fertilizer. It's more of a soil conditioner.
10	So that's how I'd answer that. Hopefully that
11	does that answer your question? Okay.
12	MR. GREENWOOD: Yes. I started to see
13	it as a vitamin.
14	MS. BRUNCH: Yes.
15	MR. GREENWOOD: Something, but anyhow,
16	Dilip?
17	DR. NANDWANI: Okay. Since Javier has
18	asked about little information about humic acid
19	and I've been working on humic acid research past
20	few years and I'll just add some information for
21	his sake and I hope it might be helpful. So about
22	carbon dioxide, Logan has already explained and

1	humic substances, you know, it's it's a broad class
2	of organic compounds and it derived from
3	humification of decaying plant materials and
4	microbial residues that includes fulvic acid,
5	humic acid, and humin. Now for your information,
6	nowadays, fulvic acid is also available
7	commercially as well as humic acid, okay? And
8	there is a lot of chemistry in it and I'm not going
9	to go into the detail, but wanted to just a couple
10	of other things that fulvic acid is soluble under
11	all these conditions and the humic acid is soluble
12	at higher pH, but it become insoluble at pH lower
13	than 2. And some benefits, as I already explained,
14	that improves the fertilizer efficiency, or
15	reducing the soil compaction. And also it has a
16	direct, you know, improvement in the overall plant
17	biomass effects on plant growth, and the use of
18	humic substances can in increase this root growth
19	and uptake of some nutrients such as nitrogen,
20	iron, phosphorous, potassium, calcium, and
21	magnesium. So it allows tolerance to aerating
22	stress such as salinity. And it I think I'll

comes in microbial 1 stop here. Ιt and-non microbial as well, ideally. I'll stop there. 2 3 hope this helps, Javier. Thank you. MR. GREENWOOD: 4 Yes. No. Thanks, 5 that's good information. So anyone else before 6 we go on to Amy again? And this is micronutrients soluble boron products. 7 8 9 MS. BRUNCH: Okay. And thank you, 10 I appreciate your extra comments there. Dilip. 11 Yes. On in terms of soluble boron products, this 12 is as planned course with or this is listed in 205.601(j) as plant or soil amendments and I know 13 Logan's going to cover the other micronutrients 14 15 In this particular instance, we actually did requests an updated TR just to deconstruct 16 17 soluble boron products from the original TR in 18 2010, that comprehensive was more on all micronutrients. 19 But soluble boron is a crop 20 micronutrient that can be sole applied or again,

applied full yearly according to the TR, when

compared to other recognized plant micronutrients

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2	deficiency is responsible for significant crop
3	losses, whether in volume, quality and that's an
4	annual thing. So this has been on the national
5	list since it was published in 2000. This one is
6	actually pretty straightforward, majority of the
7	comments were in favor of relisting this. This
8	is it's a micronutrient again, so it's a very
9	minor input with a very major implication to
10	farmer's bottom line was one commenter's
11	statement. And it does help the ability to just
12	correct those nutrient deficiencies which is
13	really important in organic production is just to
14	make that well balanced soil. With that and just
15	kind of a brief overview, but I invite questions.
16	MR. GREENWOOD: Okay. Any questions?
17	Comments? Okay. Seeing none, then we're back
18	to Logan for more micronutrients.
19	MS. PETREY: Yes, for the others. You
20	don't listen. Okay. So micronutrients, the
21	sulfates, carbonates, oxides or silicates of zinc,
22	copper, iron, manganese, molybdenum, selenium, and

deficiency in boron is the most common. Boron

1	cobalt, that one always catches me up. But at
2	205.601(j) as plant or soil amendments with the
3	annotation that they cannot be used as defoliant,
4	or sorry, or desiccant. And those made from
5	nitrates or chlorides are not allowed.
6	Micronutrient deficiency must be documented by
7	salt or tissue testing or other documented methods,
8	same with the boron. And although these are micro,
9	they are essential, and we have had over 90 percent
L 0	support in the oral and or in the written
L1	comments. So they are required in very small
L2	quantities. Although some forms of
L3	micronutrients are found in the soil, many
L 4	producers find deficiencies of some or all of the
L5	micronutrients on this list. Listing are made up
L 6	of both compounds and natural minerals, and after
L7	the physical processing such as breaking or
L8	grinding, these can be used as micronutrients.
L 9	Micronutrients are also considered heavy metals,
20	but the annotation prevents contamination by
21	restricting issues to correct a deficiency. And
22	again, we've had overwhelming support for these.

1 Any questions?
2 MR. GREENWOOD: Questions for Logan?
3 Yes, Dilip.
DR. NANDWANI: This is really nice that
5 to hear these lot of micronutrients. Can I quickly
6 ask about this, there are some other
7 micronutrients, also are we going to present
8 separately? They are also very important for, you
9 know, organic agriculture crop production such as
10 maybe iodine or something else.
MS. PETREY: Right. Like silica or
it. Sometimes we may see that that is essential
or not, but, Jerry, do you know? Does anybody know
on that? Or Nate, if there's a come up? I'm not
sure if there where their sunsets are, but
DR. NANDWANI: Okay. They may be
17 separate sunsets.
MR. POWELL-PALM: Right, exactly. So
in rotation, but Kyla, go ahead.
DR. NANDWANI: Thank you.
MS. SMITH: I mean, I think correct
me if I'm wrong, and all the national list like

1	up right in front of me, but I think this is
2	let me just pull it up before I say something that
3	I don't want to say. Who's going to be quicker,
4	me or Jared? Let's race.
5	MR. GREENWOOD: Yes, maybe Jared could
6	answer that.
7	MR. CLARK: Yes. These are the two
8	listings under that micronutrient header, but I
9	will say that, you know, these are synthetic
10	versions of these micronutrients that are allowed.
11	The non-synthetic micronutrients are allowed by
12	virtue of being non-synthetic.
13	MS. PETREY: Great answer, Jared.
14	Thank you. Thank you, Dilip for the question,
15	though.
16	MR. GREENWOOD: Okay. Thank you.
17	Any other questions for Logan? Okay. So why
18	don't we go on then to Wood with vitamins C and
19	E.
20	
21	MR. TURNER: Thanks, Rick. We have a
22	listing for vitamins C and E at 205.601(j) as plant

1	or soil amendments. These have been TR in 2015,
2	as recently as 2015. They previously have been
3	bundled with, thiamine or vitamin B1. In the
4	previous sunset review, vitamin B1 was peeled off
5	and recommended for removal from the list. It's
6	my understanding that that material is still in
7	rule-making to remove that material. So there
8	were some comments, persistent comments well,
9	one commenter said keep B1 off the list. Take B1
10	off the list and also take off vitamin C and E but
11	that was the only commenter that we've heard asking
12	for that. I would say the comments have been
13	fairly limited on this. This is a these are
14	materials that we all sort of generally know fairly
15	well. I would say that the TR in 2015 was helpful
16	in sort of, continuing to maintain interest in
17	keeping these on the list. But there was a lack
18	of really practical information about how these
19	materials are used. And I think that's reflected
20	in the comments which is very little very few
21	comments and very few organizations that have
22	growers who are using these materials. There was,

though, I just want to acknowledge one particular,
and I think and thank this commenter for actually
focusing on the question that we asked, which was,
you know, help with any practical applications of
these materials so that we could really understand
how well they're being used. The one commenter
did indicate that vitamin C plays and cited
research on this, the vitamin C is actually helping
protect plants from smog damage and even alluded
to the fact that that protection from air pollution
damage, you know, had some climate change
applications as well. So I just wanted to point
that out that I did appreciate that feedback about
how this how vitamin C can actually be supportive
in particular of that particular issue. That same
commenter also supported keeping vitamin E on the
list as well. So that's what I have for now.
MR. GREENWOOD: Okay. Thanks, Wood.
That is the positive of looking at the writter
and oral comments, getting all the other
perspective, I think. I know for myself, I always
got an awful lot out of them, even though there's

2,300 pages to go through it. So it's certainly

worthwhile. Any other questions for Wood? Okay.

3 So we'll go now back to Logan with squid

4 byproducts.

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Thank you. MS. PETREY: All right. squid byproducts at 205.601(j) as plant or soil amendments with byproducts from food waste and food waste processing only. And can be used with a pH to justify -- to adjust the pH, excuse me, with sulfuric or citric or phosphoric acid. The amount of acid shall not exceed what the minimum needed to lower the pH to 3.5. So just a little bit of background, the squid byproduct, the squid are commercially harvested using nets directly above spawning grounds during mating season and just the background on that as well is that squid will die shortly after reproduction. And so as far as an environmental concern or biodiversity concern, there isn't a concern and it is restricted to this use or to this fishing. Also, these fisheries have management councils and the management includes

1	seasonal catch limits, timed fishery closures,
2	administration of permit insurance, and
3	limitations on using lights to attract squid to
4	ensure uninterrupted spawning. So they do have
5	the regulations on there to protect those species.
6	It's not under the liquid or the fish because
7	it is a mollusk, not a fish, although in the
8	international acceptances, it seems that in
9	multiple areas they did combine it with fish and
LO	so squid is not specific. The use of this is for
11	a fertilizer and it can usually range for a 2-2-2
L2	to a 3-3-3 or so, so we're not talking about very
L3	high levels and as far as the commenters, we had
L 4	over 85 percent were for the use as the annotation.
L5	Thank you.
L 6	MR. GREENWOOD: Thank you, Logan. Any
L7	questions for Logan on squid byproducts? I don't
L 8	know how you ended up with so many things, Logan.
L 9	MS. PETREY: I don't know. I'm just
20	kidding.
21	MR. GREENWOOD: You're almost done.
22	Okay. Next we have lead salts and that's Javier.

2	MR. ZAMORA: Yes, good. Buenos dias
3	a todos. Lead salts on the national list under
4	205.602(d) known synthetic substances prohibited
5	for inorganic crop production. There's been
6	several public comments not only for the public
7	but organic certifiers and national organizations
8	which most of them, if not all, are in favor of
9	keeping lead salts on the national list as
LO :	prohibited substances. It is worth mentioning
11	that the leads inhibited seed germination, root
12	elongation, seedling developing, lung growth, and
13	it's toxic to plants and can remain in the soil
L 4	for up to 2,000 years. That is all I have and thank
L5	you for making it so easy for me, so it was very
16	nice with this.
L7	MR. GREENWOOD: So I told you it
18	wouldn't be too bad, Javier, so thanks very much.
19	MR. ZAMORA: Love you.
20	MR. GREENWOOD: Yes. So obviously, we
21	want that on the list as a prohibited substance
22	and we have some other things like that. And I

This is your first time through.

think it's good that it stays prohibited. 1 comments for Javier? 2 Okay. Thank you. So the 3 last one is tobacco dust. And for some reason it's 4 Logan again. 5 MS. PETREY: This one's super easy. It's okay. Hey, Javier, you got the right 205.602 6 7 I've learned, grab those. So yes, tobacco dusk 205.602, which is also nicotine sulfate. 8 Just to 9 note that this has been on the prohibited list since the inception of the organic regulations and it 10 is there because it is a hazardous substance for 11 12 OSHA and but it can be used or was used as a natural insecticide for pest control. It is made from --13 a byproduct from commercial processing of 14 15 tobacco products or I guess you can mix tobacco and water, make it home-made. But it remained --16 17 has been on the prohibited list and all comments 18 are to keep it there. 19 MR. GREENWOOD: Thank you. Any 20 questions or comments for Logan again on tobacco dust? We heard a lot about this a few years ago 2.1

when we were looking at the suckering of tobacco

plants with alcohols and lot of disease in humans 1 2 working in the tobacco industry. And so it is a 3 very toxic product. So that actually, believe it or not, completes our sunsets. And I want to thank 4 5 all of the committee members. I mean, we had a 6 lot of work to do. Some great discussion in 7 committee and I think we've come out with a pretty decent products. I want to thank everybody and 8 9 also for the rest of the Board members for So I will turn it back to Nate. 10 discussion. 11 MR. POWELL-PALM: outstanding Just 12 work. Thank you, Rick. Thank you, crops 13 subcommittee, that was great. So on our schedule we normally would break for lunch, but we have 14 15 fairly minimal amount to cover before the end of So I was hoping if it's all right with 16 the dav. 17 the Board to break for 15 minutes here. Come back, 18 go through PDS, we'll then go through DTO, which 19 we differed from yesterday and then we have an opportunity to hear if there are any more questions 20 on CACS, which we're cutting it short. And then 2.1 we'll run over the work agenda and then closing 22

1	remarks and a big old additional welcome to our
2	new members. So if it's all right just to break
3	and then we'll come back, get through this three
4	items, and wrap her up. So if we could have the
5	slide and I'll try to do this math. But I think
6	we're going to go to eight after or ten. Thank
7	you. See you all in just a bit.
8	(Whereupon, the above-entitled matter
9	went off the record at 1:54 p.m. and resumed at
10	2:09 p.m.)
11	AUTOMATED VOICE: Recording in
12	progress.
13	MR. POWELL-PALM: All right. Thank
14	you, everyone, for hustling through that break.
15	Hope we got a little reprieve. Next, we're going
16	to to dive into policy development subcommittee,
17	PDS. And I will hand it over to Mindee.
18	MS. JEFFERY: Thank you, Nate. I'm
19	just going to stall for one second here, so
20	everybody can
21	MR. POWELL-PALM: Yes. Not a worry.
22	MS. JEFFERY: come through. In the

1	meantime, as the policy development subcommittee
2	chair, just wanted to let the stakeholders know
3	that we really heard you on the persistent
4	questions for meeting timing. And I wouldn't say
5	we have an answer or a home for those questions
6	yet. But that we do have some inspiration going
7	on. And I am imagining several one-on-one full
8	court basketball match ups amongst the
9	subcommittee chairs to see who's going to win the
10	contest of where this conversation will live. But
11	so, you know, folks, we're listening out here.
12	Thank you very much for all your persisting
13	comments on the subject of meeting timing. So are
14	we all here? Is everybody ready? I think we're
15	close. I'm still kind of looking for a couple
16	more.
17	MR. POWELL-PALM: Yes, maybe one more
18	minute as folks trickle back in.
19	MR. TURNER: And we need a proper
20	basketball game, Mindee. There's no question in
21	my mind.
22	MR. POWELL-PALM: I feel like

1	Sacramento we actually you have to show up with
2	
3	MS. JEFFERY: Man.
4	MR. POWELL-PALM: Jerry's ready to go.
5	MS. PETREY: That's what I said too.
6	I was going to say that to Mindee.
7	MS. JEFFERY: I don't think there's
8	going to be any surprise when Wood takes me down
9	in that one-on-one battle.
10	MS. PETREY: It's so funny when we're
11	all in the Zoom rooms, though. There's like no
12	like I have no idea how tall anybody
13	MR. POWELL-PALM: Everyone's the same
14	height.
15	MS. JEFFERY: Okay. How are you
16	feeling, Jerry? Are you ready?
17	MR. D'AMORE: Yes, ma'am.
18	MS. JEFFERY: Okay. Hold on. Let's
19	just give it one more look because I think there's
20	two more. I was waiting three more. Sorry. I
21	might have jumped the gun on you, Jerry.
22	MR POWELL-PALM. If you're there

1	Liz, Javier, or Logan and you want to just flash
2	your cameras on real quick to let us know you're
3	there or just give a shout out.
4	MR. D'AMORE: Well, we've got the time
5	to give the time, I think, don't we?
6	MR. POWELL-PALM: I think we do.
7	We're doing pretty good.
8	MR. D'AMORE: Yes.
9	MR. TURNER: I think in his defense
10	he's doing proper farming. He's checking on his
11	crew and making sure everything is going smoothly.
12	So let's give him a minute.
13	MR. D'AMORE: So how is it that we
14	settled on basketball? I mean, as a wrestler that
15	was just kind of tough for me to take, but I say.
16	MS. JEFFERY: Well, do you really want
17	to hear the truth of my metaphor, Jerry? The
18	founding one of the founding principles of the
19	game of basketball was the spiritual enrichment
20	of the community and I view organic much like I
21	view basketball. So there you have it.
22	MR. D'AMORE: Well, can't argue with

1	any piece of that.
2	MR. TURNER: And as a lifelong
3	basketball player, I'd hop on that train with
4	Mindee because I think it's an apt metaphor.
5	MR. POWELL-PALM: Well, let's get
6	started here. Liz said she has is, just about
7	to hop on.
8	MR. D'AMORE: Do I have your
9	permission, Chair?
10	MS. JEFFERY: Yes, sir. Thank you
11	very much.
12	MR. D'AMORE: Not at all. Thank you.
13	And so policy development subcommittee proposal.
14	And it is a policy and procedures manual, PPM
15	revision. The proposal before you had its origins
16	in a spring 2021 discussion document and was
17	
1 /	introduced at that time under the heading,
18	
	introduced at that time under the heading,
18	introduced at that time under the heading, Amendments to the PPM to provide clarity and to
18	introduced at that time under the heading, Amendments to the PPM to provide clarity and to address protocols for oral and written

1	for full Board discussion and vote. There were
2	five total stakeholder comments addressing this
3	spring 2020 proposal with four approving of the
4	work and one firmly against the proposal. The
5	opposing commenter had concerns regarding certain
6	terms not being well enough defined and the use
7	of the word impugn as not appropriate. This is
8	to be seen in well, it's not I thought it
9	was a comment, but any way, it's done in red on
10	the document. One of the supporters of the
11	proposal was also not happy with the word impugn
12	and offered malign as an alternative. Generally
13	speaking, the commentators recognized the
14	revisions to the PPM as minor clerical changes to
15	provide clarity and as a process to encourage a
16	respectful comment environment. As one of the
17	commenters is who was opposed to the proposal
18	made reference to FACA requirements, I'm going to
19	give our chair, Mindee Jeffery, the floor to take
20	any questions or give her own comments to FACA as
21	she sees fit. And that's it.

JEFFERY: Great.

MS.

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Thank you,

1	Jerry, I did appreciate. I think the public
2	comments. And so I went back and took a look at
3	FACA and looked through section 10 for meeting
4	conduct. And therein listed under A1, we are in
5	compliance with the notion that the meeting is open
6	to the public. And looking at A3, it lists,
7	interested persons shall be permitted to attend,
8	appear before, or file statements with any advisory
9	committee subject to such reasonable rules or
10	regulations as the administrator may prescribe.
11	So the allowing of written and oral comments,
12	submissions clears our responsibilities under
13	FACA. And as the PPM functions to assess the NOSE
14	in the implementations of its duties under author,
15	these are the PPM are our reasonable rules and
16	regulations for expectations around the public's
17	interaction with. Extension is repetition of
18	what's already in written comments. And this
19	addition update produces alignment. I think it's
20	pretty clear that we're just codifying a level of
21	respect and that we definitely want to hear all
22	the facts and all the data from every stakeholder.

1	And we want to hear all the reputations as facts
2	and data. So we're just keeping it classy really
3	here with this update.
4	MR. D'AMORE: Playing nice.
5	MS. JEFFERY: Does anyone have
6	questions?
7	MR. GREENWOOD: Kyla, is that a raised
8	hand?
9	MS. SMITH: Jenny, do you want to go
10	first?
11	DR. TUCKER: I would like to suggest
12	that that becoming new a subtitle to the PPM, keep
13	it classy. Very, very nice.
14	MS. SMITH: I just had a question about
15	some comments that made the distinction between
16	the word impugn and malign, and what your all
17	thoughts were on that.
18	MS. JEFFERY: Sure. Thank you. I
19	think we all like this suggestion, and since we're
20	reflecting consistency in the PPM, we felt like
21	we can put that in our back pocket and when or if
22	the PPM gets updated again, we liked the word.

1	But because we're reflecting consistency, we're
2	sticking with the word as is. I don't see any other
3	hands sometimes when we're in this side gallery
4	mode, I don't always see you, but it sounds like
5	no other comments. We can move to a vote.
6	MR. POWELL-PALM: Yes, we can. So we
7	have a vote for motion by Mindee and seconded by
8	Jerry. We're going to begin voting. I believe
9	with Mindee? Is that right Kyla?
10	MS. SMITH: That's what I have. Yes.
11	MR. POWELL-PALM: All right. So
12	Mindee, your vote please.
13	MS. JEFFERY: Yes.
14	MR. POWELL-PALM: Okay. Yes. For
15	Mindee. Allison?
16	MS. JOHNSON: Yes
17	MR. POWELL-PALM: Dilip?
18	DR. NANDWANI: Yes.
19	MR. POWELL-PALM: Logan?
20	MS. PETREY: Yes.
21	MR. POWELL-PALM: Kyla?
22	MS. SMITH: Yes.

1		MR. P	OWELL-PA	LM:	Wood?
2		MR. T	URNER:	Yes.	
3		MR. P	OWELL-PA	LM:	Javier?
4		MR. Z	AMORA:	Yes.	
5		MR. P	OWELL-PA	LM:	Amy?
6		MS. B	RUNCH:	Yes.	
7		MR. P	OWELL-PA	LM:	Brian?
8		MR. C	ALDWELL:	Yes	5.
9		MR. P	OWELL-PA	LM:	Jerry?
10		MR. D	'AMORE:	Yes	
11		MR. P	OWELL-PA	LM:	Carolyn?
12		DR. D	IMITRI:	Yes	
13		MR. P	OWELL-PA	LM:	Rick?
14		MR. G	REENWOOD): Ye	es.
15		MR. P	OWELL-PA	LM:	Liz?
16		MS. G	RAZNAK:	Yes.	
17		MR. P	OWELL-PA	LM:	Kim?
18		MS. H	USEMAN:	Yes	
19		MR. PO	OWELL-PA	LM:	And the Chair votes,
20	yes.				
21		MS. SN	MITH: T	hat m	akes it 15 yes, 0 no,
22	0 abstain,	recuse	e, or abs	sent.	The motion passes.

1	MR. POWELL-PALM: All right. Again,
2	a big shout out to Mindee for the work and Jerry
3	for the work on this. It's a small but mighty
4	committee that PDS. There's only three of us on
5	it.
6	MS. JEFFERY: I'm given that to Jerry.
7	Good job, Jerry.
8	MR. D'AMORE: Thank you.
9	MR. POWELL-PALM: All right. So we're
10	cruising along. Deferred votes. Yesterday we
11	did not have time to get to DTO. That will be
12	discussed and lead the discussion led by Wood.
13	So if Wood you would be up for going over GTO now.
14	MR. TURNER: Sure.
15	MR. POWELL-PALM: And draw back into
16	materials.
17	
18	MR. TURNER: Sure. So I guess this is
19	second day extension of the materials section of
20	the agenda. So a reminder to everyone that we have
21	a discussion document on distilled tall oil that
22	I think you've all had a chance to review. We have

1	a petitioner who has is interested in seeing
2	distilled tall oil be listed as 205.601(m) and
3	205.603(e) as a synthetic substance permitted in
4	organic agriculture and used in particular as an
5	inert ingredient and as an adjuvant for use to
6	solvent, sticker, anti-leaching agent, and time
7	release agent in pesticides. So we've had I
8	think is we heard in verbal comments. I think I
9	heard someone reference 22 months. This is a
10	petition that's gone through several rounds of
11	documentation requests and input from the
12	petitioner. We've had a TR on this as well and
13	just to give you a little bit of history. It was
14	a previous petition on this in '08 that ultimately
15	ended up being rejected, but it was not DTO, it
16	was tall oil specifically. And there was a
17	concern, I think in the petition that in the
18	TR that there had been a lack of clarity between
19	a material referred to as crude tall oil and
20	distilled crude oil. They're too we did want
21	to make sure in the TR this time that they were
22	distinctly represented and distinctly address

because they may have differences. And so that's an important issue that I want to make sure people understand that this petition, even though there's some history on tall oil being reviewed in previous iterations of this Board. You know, we're trying to understand more specifically this petition in the context of the distilled tall oil.

But I think more importantly, and you heard in my introduction, the issue here is that we have a material that is being petitioned. That is intended to be used as an inert or adjutant, not as an active ingredient. And the use is to augment the functionality and sequestration of approved substances in organic production. As we've all noted in a variety of different contexts, however, we have no process currently today for how to actually evaluate inert ingredients. I will say that in our subcommittee, we've had a number of different discussions on this topic over Looking at the material on the merits, at time. raising a number of different questions as a group about the fact that this material, again, I don't

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want to conflate a lot of issues here, but I think 1 2 there's a lot of complexity here. One is whether 3 or not -- one is the fact that this is a petition for an inert ingredient. And two, is whether or 4 not the material, as we understand it, isn't --5 6 functions as an inert ingredient or an active 7 ingredient. So I think that's been really an interesting part of our process, concern about 8 whether the rates that are -- that have been 9 10 indicated as being kind of the rates of application 11 for this material really do allow it to function 12 as an inert ingredient versus an active ingredient. 13 So I just -- that's been a really interesting part of this process. 14 15 I do want to point out in the discussion document, however, that there is an unfortunate 16 17 And it's on the -- in the third paragraph 18 that the section called the inert versus active. 19 The document says the petitioner has submitted 20 additional information --I'm sorry. The petitioner has since responded to the use of the 2.1 22 substance as an inert is intended to produce the

effects of an insecticide. I want to be clear. 1 not what the petitioner said. 2 That's 3 petitioner sensory responded that the use of the substance as an inert is not intended to produce 4 the effects of an active insecticide. So this has 5 6 the petitioner's perspective on 7 particular issue that is not an insecticide. However, I will say that those issues have come 8 9 up in the context of our conversation subcommittee on this material. And I think we're 10 11 still, you know, really still kind of -- still 12 working through those kinds of questions.

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know, I don't want to -- I think we've learned a lot about this material and I think we've come to this issue with a very open mind. Despite the fact that we don't have a process for evaluating inert ingredients. I think we've learned a lot about material. We've certainly recognize that there's a potential for this material to provide some benefits including sequestration of pesticides and

1	micronutrients from leaching out of the soil. I
2	think that's well, leaching into groundwater
3	in the case of pesticides or leaching out of the
4	soil in the case of micronutrients. So I just
5	I do want to point that out and I do also want to
6	point out that there are other context where this
7	material certainly in the context of food
8	packaging, has been identified by FDA as the one
9	of these generally regarded the safe materials,
10	so I that would you have an open mind on material.
11	However, we do not have a path forward on this
12	and so I did want to I didn't want indicate that
13	there is there was a lot of interest from the
14	community on this. I think some commenters
15	acknowledge the complexities that are raised by
16	this petition and unfortunately, the timing of this
17	petition, given the fact that we're trying to
18	figure out this get some guidance on how to
19	actually handle inert ingredients, it's
20	complicated. You know, certainly there's been
21	some commenters who have suggested that we should
22	just reject the petition outright, as it is. Let

me say -- let me see here as well. And then quite a bit of responses from I think the community that the petitioner and the petitioner community of producers of these types of materials that want to see these kind of materials move forward because of the functional benefits of material -- the potential functional benefits of materials like DTO.

So, you know, it's been an interesting process to sort of hear from the community and try to make sense of sort of, you know, what the right pathway is. But I just wanted to continue to go back to this point that until we have a path forward on this, until we have a clear pathway on how that how to evaluate inert materials that recognize or discussing ad nauseum, about how, you know, may have -- may be listed on obsolete lists managed by other agencies and so on and so forth. We're kind of in a little bit of limbo period here. And unfortunately, it creates a situation where we have a petitioner who is eager to see some decision made on this material and we have no path

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1	forward. We have no reasonable path forward, we
2	have no imperative on this, on how to manage this
3	process. So that's I'll pause for a minute
4	because again, we I want to indicate this is
5	a discussion document. We would welcome continued
6	responses to questions to our stakeholders in this
7	material over the next couple of months. But I
8	do want to flag this very important question that,
9	you know, I'm not sure what the responses to those
10	questions will mean, you know, if we don't have
11	a path forward on this. So again, no vote. I'm
12	trying to outline this as clearly as I can. I hope
13	this is helpful to those who don't who haven't
14	been as involved in these discussions in the
15	subcommittee, but I'll pause for a minute, Nate,
16	and see if there's any questions we can discuss
17	here.
18	MR. POWELL-PALM: Mindee, please go
19	ahead.
20	MS. JEFFERY: Thank you. Honestly, I
21	wanted to just take a minute and really appreciate
22	the netitioner because I know that we've come back

to them and gotten more information from them. 1 And they've been really in a great dialog in that 2 3 process. And I really appreciate the number of written comments on this subject and the level of 4 5 expertise people were sending to us. Appreciate 6 knowing that oral comments [inaudible]. piece of advice I got from [inaudible] started 7 the California Organic 8 looking at Products Advisorv Committee 9 was to remember that 10 regulations take time because it's good for 11 And then I just wanted to appreciate society. 12 Jenny's talking about the advanced notice of 13 rule-making on this subject and look forward to seeing where that goes and how that dovetails into 14 15 our process and seeing when, if, and how evaluation of inerts comes back across aisle as it were. 16 If I might in with 17 MR. POWELL-PALM: 18 a quick question for Jenny. I think if I've got 19 my timeline right. Oh, sorry. Yes. You have vour headset. In -- I think it was 2014, NOP asked 20 2.1 NOSB for process for reviewing ancillary а 22 substances and a review or recommendation came out

1	in 2016 and the NOP said they were reviewing it.
2	I was just wondering if there's any update on that
3	review process from 2016 recommendation on
4	ancillary substances?
5	DR. TUCKER: Yes, that one I was
6	listening the whole time. You just you can hear
7	me better when I'm talking on my headset than when
8	I'm yelling at my computer. So that's why I
9	plugged it in.
10	MR. POWELL-PALM: Sure.
11	DR. TUCKER: So that is one we have not
12	moved forward with ancillary substances since that
13	work stopped, so I don't have any update on that.
14	I believe and I'm frantically hoping somebody is
15	going to chat me in the answer for my team here.
16	I believe ACA has done some kind of best practice
17	has done a best practices document on ancillary
18	substances or was working on one. You know, this
19	is where I'm going to get myself in trouble if I
20	talked too much because the reality is, I really
21	don't know this has not been one that I have been
22	very heavily involved in. So does somebody on my

Τ	team who knows clearly more than I do, like to jump
2	in here, this is the phone a friend part of the
3	conversation.
4	MR. POWELL-PALM: Absolutely. No
5	pressure because we were just putting you on the
6	spot.
7	MS. SMITH: I'm also trying to phone
8	a friend on the ACA best practices part. So if
9	I get a response I'll let you know.
10	DR. TUCKER: Okay. I'm sorry. I
11	don't have a good answer at this time. I do know
12	that this is not one that has been on our active
13	work agenda since the Board did its work. This
14	is a bit before my time in my current role and I
15	was not all that involved in this at that time.
16	MR. POWELL-PALM: I think to yes,
17	to Woods point, sorry Amy, I don't mean to cut you
18	off. To Wood's point of having a procedure and
19	process available to us. It maybe great to follow
20	up on this with you after the meeting. Please go
21	ahead, Amy.
22	MS. BRUNCH: Thank you, Nate. And I

1	echo, you know, the need to have a procedural
2	process. I was just going to make a comment, you
3	know, and in the oral comments, there was something
4	that was mentioned about the quantity applied of
5	this and it points to, you know, inert and not maybe
6	having any insecticidal properties, but, you know,
7	there's in farming, you know, just minimal
8	amounts can really equal a big punch. I point to
9	things such as gibberellic acid. It's a plant
10	growth regulator, it's approved to be used with
11	restrictions in organic, those are applied in
12	it's in a formulation but the actual composition
13	is tenth of a gram applied on an acre. So 1.32
14	acres equals a football field. So when we look
15	at, you know, small amounts creating a big punch,
16	it is worth looking into the details and not just,
17	you know, putting them up to chance that low amount,
18	you know, it doesn't have any properties that can
19	contribute to, you know, in this case an
20	insecticide or something. So just a comment to
21	mention.

MR. TURNER: I really appreciate that,

Τ	Amy, that was meaningful to hear you say that.
2	I think that we did have discussion as a
3	subcommittee on that particular issue, and I think
4	that will definitely bubble up to something that
5	I think sort of added, again, not to conflate issues
6	here, but it added a layer of complexity to our
7	concern about this because in fact it's being
8	suggested that it's in an inert or adjuvant but
9	in fact it's, you know, there is some obvious debate
10	on that which I appreciate your comment, so I
11	appreciate you saying.
12	MS. BRUNCH: No problem. Thanks.
13	MR. POWELL-PALM: Carolyn, please go
14	ahead.
15	DR. DIMITRI: So this seems very
16	this whole product seems very weird to me. So
17	oh, my computer's jumping in the conversation.
18	So can and maybe this has already been done,
19	but could someone just give me like a three
20	sentence, non-technical justification for like,
21	why this would be helpful to farmers?
22	MR. TURNER: I would love to defer to

1	any grower in the subcommittee or who has thoughts
2	in this, but my understanding of the material is
3	that it actually helps bind other active materials.
4	It allows them to be god, I'm so I'm already
5	desperate for somebody to jump in.
6	MS. PETREY: Okay. I think they said
7	something earlier saying something like it was
8	sticky. You know, that
9	MR. TURNER: Sticky, that's it.
10	MS. PETREY: You know, cohesive type
11	of not chelating, but something to that effect
12	
13	MR. TURNER: It pulls it together.
14	MS. PETREY: so whether it's
15	sticking to the plant so that it's staying on there.
16	And so like a lot of times when we apply products,
17	there's a rain fast period or a you know, where
18	you're trying to make sure that you're not applying
19	right before a rain because it's going to wash off
20	and you wasted a lot of your application. Or you
21	don't want to irrigate overhead irrigation
22	immediately after. Or if there's like, you know,

1	a lot of fog setting in. So there's some
2	environmental conditions that can limit you on
3	application timing. And I think that that's what
4	this is. Wood, does that sound right? The resins
5	stuck to me like the pine sap stickiness, so
6	MR. TURNER: Thanks for jumping in,
7	Logan. I was so worried about sounding stupid that
8	I didn't want to say sticky but
9	DR. DIMITRI: You feel like you said
LO	something stupid
L1	MR. TURNER: You should be doing that.
L2	MR. POWELL-PALM: I think we need to
L3	throw the word sticky into the official
L 4	definitions. It's very, very useful. If we
L 5	could, please hear from Javier next.
L 6	MR. ZAMORA: Yes. I think with
L7	farmers we referred to some like this as a sticker
L 8	for whatever product we're applying to our crops
L 9	just before the rains or kind of like to hoping
20	that it stays there longer until the ingredient
21	that we're applying, does its thing, if you will.
22	But also any sort of sticker and maybe in this

1	kind of this type of, pine resins and stuff will
2	be leaching out, will be washed off the plant and
3	end up in the soil. So my concerns and my questions
4	are how long will it stay there? Or will just
5	disappear or will it be washed? What would be the
6	effect on our soil or other plants around after
7	the usage of this sticker because we referred, to
8	these materials as stickers ourselves.
9	MR. POWELL-PALM: Great. Yes, thank
10	you for that. Kyla, please go ahead.
11	MS. SMITH: Yes. I just wanted to, you
12	know, Nate, you would ask Jenny about the ancillary
13	substances recommendation. And so I just wanted
14	to say that while related, I believe these are
15	separate topics, right? So we don't have a,
16	currently, we don't have a review process for
17	inerts nor ancillary substances.
18	MR. POWELL-PALM: And you said, if I
19	have a right would be more processing and multi
20	crops and livestock.
21	MR. TURNER: Like propylene glycol.
22	MS. SMITH: Correct. Yes. So, yes.

1	So, anyway, hopefully the ANPR will help to
2	address the inerts situation. And then we need
3	to maybe circle back around or see what to do, what
4	the next step is with the ancillary substances
5	recommendation. So again, while related, also
6	separate.
7	MR. POWELL-PALM: Yes.
8	MS. JEFFERY: Because the inerts one
9	was the when the former Board tried to see if
10	the safer choice that EPA would work, and it really
11	wouldn't. I think that was the other side. The
12	previous Board work on inerts was when they tried
13	to marry us into the Safer Choice program, and it
14	didn't work out. I think that's how the history
15	went on the inert side.
16	MR. POWELL-PALM: Do you have
17	something, Logan?
18	MS. PETREY: No, I apologize. Thank
19	you.
20	MR. POWELL-PALM: Okay, good. Thank
21	you. All right. Mindee, please go ahead.
22	MS. JEFFERY: Yes, thanks. I just

1	wanted to jump right in again and to say good job,
2	Wood. Thank you so much for taking on some really
3	dense subjects. Appreciate you.
4	MR. TURNER: It's the gig, right? And
5	it's what we do.
6	MS. BRUNCH: Yes. See, I got all the
7	really simple ones, really. You're doing the
8	heavy lifting here.
9	MR. TURNER: It will of a sudden hit
L 0	you, I promise you.
L1	MR. POWELL-PALM: Kyla, please go
12	ahead.
13	MS. SMITH: Yes. So just wanted to
L 4	just chime in a little bit more about the CACS work
L5	on ancillary substances and that this was as far
L 6	as I understand it talked about it. And did some
L7	training on it that there were more than one way
L8	to go through this process. However, it didn't
L 9	get incorporated into the CACS best practice
20	document on material review stuff because there
21	wasn't one agreed upon way, there wasn't sort of

consensus amongst the groups. So anyway, that's

my understanding. 1 Wood, please 2 MR. POWELL-PALM: go 3 ahead. And Nate, I just want to 4 MR. TURNER: 5 say before we wrap up discussion on this, that I 6 think we're flagging some issues here discussion document level and I -- we can certainly 7 discuss it, I welcome any thoughts that you or the 8 program has on this, but I don't know what our 9 10 pathway is to bringing this to a proposal in its 11 So I just want to say that, I don't current form. 12 know how we'd bring proposal for the fall. unless someone wants to weigh in here and tell me 13 that I'm wrong about that. 14 That's where I'm 15 That's where I'm ending this. leaving. where I'm jumping off here. 16 17 MR. POWELL-PALM: Yes, I think this 18 entire discussion's highlighted some some deficits 19 in our ability to proceed with process. I think that's a valid point. And I'm excited to 20 get with the program and see what our options are 2.1

and how he can keep addressing this. Because it's

-- yes, it sort of permeated all subcommittees, 1 2 livestock, and handling. All right. crops, 3 How's everyone feeling? That was intense. appreciate all of you getting through that right 4 5 after a quick break. So and not having lunch yet. 6 Amy, did you want to pick up and offer a chance to hear any other Q&A about the CACS discussion 7 document and we ended with on Tuesday? 8 9 MS. BRUNCH: Yes. Thank you, Nate, 10 for this extra time. Ι just think that's worthwhile since we're convened here as a group 11 12 to make sure that all voices are heard on. of our CACS topics, but especially the one that 13 we ended the day on Tuesday. So I asked for this 14 extension to be able to convene for this purpose. 15 And on the oversight to deter fraud, we did have 16 some good questions and discussion on the acres 17 on certificate, which actually is intended on being 18 19 just a quantitative quick way to match production area with products produced. So we did have some 20 discussion on that. I'd like to make sure that 2.1 22 we heard everybody's voices on that. And then just

Τ	see if there was any questions or comments on part
2	two of that discussion document, which is the
3	universal bill lading, which really is a
4	conversation about identifying standards or record
5	keeping minimums as some of the written comments
6	suggested. Just so we can have a clear picture
7	on farmer reconciliation with their lot tracking
8	numbers to their bill sales to end users and also
9	from a certifier inspector point of view for these
10	crops checks. So with that, I will turn it back
11	over to the team this for quick Q&A. Yes, Nate?
12	MR. POWELL-PALM: All right. So, Amy,
13	may I asked you a question as a producer.
14	MS. BRUNCH: Oh, sure.
15	MR. POWELL-PALM: So you sell grain
16	primarily, as your organic crops, and you sell a
17	lot of different loads. When you get well,
18	could you describe to us real quick what is a bill
19	of lading and why is it relevant here?
20	MS. BRUNCH: Yes, the bill of lading
21	is essentially our ability to do lot tracking on
22	our farms so our bill of lading and OST had asked

1	for are unique way to accomplish this. With every
2	load that we deliver from our farm, it has the date
3	in which the or the crop year in which our crop
4	was produced, which farm it came from, if it was
5	in storage, what inside it was located in, and you
6	have my certifier information on the sheets, as
7	well as contact information and the type of crop.
8	So that I guess, as a whole or are some significant
9	pieces to the bill of lading. It also has my
10	trailer trap seals and I am growing food for the
11	consumer. So all of that process is my lot
12	tracking. So ideally if there was a question on
13	any of the loads that I delivered, I could go back
14	into my system and understand where things came
15	from. So, you know, we heard from
16	MR. POWELL-PALM: Follow-up.
17	MS. BRUNCH: I'm sorry.
18	MR. POWELL-PALM: And I might ask you
19	a quick follow-up to that. So when you have your
20	lot number, it captures a lot of information about
21	the products that you're sending out the door to
22	your buyers. When you get receipts or settlement

statements from your buyers, does that lot number 1 usually track through? 2 3 MS. BRUNCH: Yes, that's а aood auestion. And I thought I was on my own little 4 island with my buyers. No, it doesn't. And then 5 hearing with a broader audience just with my own 6 7 producer network and other written and oral We're all kind of in the same boat. 8 comments. It's very difficult then to match up our lot numbers 9 for the loads me delivered with the settlement 10 11 sheet, which is what the buyer gives to us to just 12 recognize the loads that we brought in and the only way really to do it as match it up with dates, but 13 it is tough when we're taking our products across 14 15 state lines, the dates don't always match up, so 16 it's a little bit of a guessing game. 17 MR. POWELL-PALM: So seems like there 18 could be a little bit of pressure applied from the 19 inspection process as well as certifiers that the 20 buyers, handlers, brokers who purchase primarily commodities, but all organic crops should be 2.1 22 expecting these lot numbers to carry through more

1	consistently. Kyla, perfect timing. What do you
2	have to say about this as a certifier?
3	MS. SMITH: So again, maybe this was
4	like more the intent of the discussion document
5	than the actual like wording being so like
6	hyper-focused on the document of the bill of
7	lading. But I'm just thinking about, you know,
8	maybe not all sectors use a bill of lading. And
9	so I think maybe what is intended, it's just sort
10	of what you were talking about, Nate, is like that
11	through line of certain elements on all audit trail
12	documentation. And so I know as the proposed rule,
13	there was some proposed language to have further
14	detail in the record keeping section that to
15	identify products as 100 percent organic, organic,
16	or made with organic and things along those lines.
17	Like on all audit trail documentation. And so
18	I guess I'm just like wondering if perhaps we don't
19	make it so specific.
20	MR. POWELL-PALM: Super helpful.
21	Logan, please go ahead.

1	MS. PETREY: Thank you. Thank you,
2	Amy, for all this work. Okay. So with bills of
3	lading so we do I want to talk about produce
4	and/or grain. It's a very different type
5	industries of the way product is handled. So in
6	veg, you know, we're typically you're dealing
7	with packages. So we're talking about small
8	packages and not bolt product like grain, I mean,
9	with grain, you may be putting at least in my
LO	circumstance, we may be putting multiple fields,
L1	even different varieties and storing it in a single
L2	bin. And I wouldn't be able to separate that.
L3	So a lot to me on the produce side means a specific
L 4	planting in the field by variety, by a certain crop.
L5	And because of food safety reasonings, we are able
L 6	to track that lot number specifically to like a
L7	GPS coordinate, you know, a mapped area of that
L 8	and that goes through our system. Now, I
L 9	understand our farm is you know, digitalized with
20	accountants and things like that and software.
21	So I understand this. And not every farm is this
22	way, but we are able to track that through, or

whether, you know, it gets received with receiving
reports. And then we also, you know, when it loads
up on a truck, we have the purchase orders and I
mean, when you go through the audit tracing, it's
just there's so many pages, but you may not have
that lot number identified on every single piece,
but it's like a map and so you just kind of connect
the dots from this number with that number and this
number, you know, equals this and that, you know,
it just kind of opens it up to a bunch. So it's
almost kind of fun doing the audit trace back
because you click on one number and that's a bunch
of possibilities and you find your other
possibility and go down. With the grain on our
purchase settlements, we don't I don't I'm
looking at one, don't have the lot number. What
I do have is the bill of lading ID number. So like
our client or customer gave us a specific PO for
that or bill of lading number, and then on that
bill of lading sheet, if I were to reference back
and look back at the sheets, I have the lot number
on that. I don't know if that helps anything, but

1	sometimes it's not like the lot number that I
2	assign at the farm may not be there, but it's a
3	trail to find back. Don't know if we, you know,
4	can universally put a field lot number on
5	everything, but that's how we track it on here with
6	our different types of produce and grain.
7	MR. POWELL-PALM: Super helpful. If
8	I may jump in here real quick, Amy.
9	MS. BRUNCH: Yes.
L 0	MR. POWELL-PALM: I think as an as
L1	organic inspectors, we are trained to, as you're
L2	saying, follow that road map, figure out how the
L3	connectors exist. What Amy, I think, is citing
L 4	is when basically there isn't a real connector
L5	between a receipt and a bill of lading. And be
L 6	it a lot number or a purchase order number or
L7	another connector, it seems like between farm and
L 8	aggregated processor, there is this growing black
L 9	box of information.
20	MS. PETREY: I don't think it should
21	be. I think that that needs to be handled, so yes,
22	absolutely.

But I appreciate 1 MR. POWELL-PALM: 2 that, we want to make this work for everybody. 3 So that was a really helpful example. MS. PETREY: 4 Yes. 5 MR. POWELL-PALM: Kim, please go ahead. 6 7 I'll just give it MS. HUSEMAN: Yes. from a buyer's perspective as well. So and maybe 8 9 I'm going down this in a little bit different of 10 an angle, but we use BOLs. First off, anything 11 that comes into our facility has to have matching 12 internal purchase order number on that BOL, if not, 13 it's rejected before it ever entered our site. And that's for organic integrity and a bunch of 14 15 other reasons because we don't want a low that was 16 supposed to go to our neighbors to end up at our facility, right? So we have internal numbers that 17 18 we communicate with our buyers to link those up. 19 If we're looking from a mass balance standpoint, you know, to me, I would think that weights, and 20 I'm not buyer of vegetables so I can't speak to 2.1 what Logan just talked about. But I do appreciate 22

that aspect. But if we're trying to do a mass 1 balance, I think weights are very critical to this 2 3 And I don't know who's responsible for entering that, and how does that get connected? 4 5 Because from an audit standpoint, I know what we 6 go through from a buyer. The disconnect to me is the link between the certifier of the buyer and 7 certifier of the seller of product. 8 And it's a very difficult topic, I quess, is what I'm getting 9 And I'm not sure I'm clear on the angle in 10 at. 11 which we're trying to go to create that conduit. 12 MR. POWELL-PALM: If I may, Amy, I 13 think, you know, the spark for this discussion document is acknowledging that break between the 14 15 certifier with the buyer and certifier with the In trying to figure out through best 16 seller. practices, how do we have more consistency on that 17 18 bidirectional information discovery? And so when we're an inspector for either party, it should be 19 the similar, if not the same information we're 20 2.1 seeing on both ends. Is that correct, Amy? 22 Anything to add to that?

1	MS. BRUNCH: Yes. That's correct.
2	The bidirectional look back is what we're going
3	through and having those common elements go through
4	the chain. And one thing, Kim, that was great
5	perspective from your point of view as a buyer.
6	From the farm level, a lot of these products are
7	leaving without being scaled up. So without
8	MS. HUSEMAN: That was yes.
9	MS. BRUNCH: Yes. So I mean, that's
10	a good point. It's just really to make sure you
11	know, things aren't being double counted and
12	through different places in the supply chain, you
13	know, there's different certifiers involved, so
14	it's just looking trying to get similar data
15	so the whole process from start to finish really
16	examined.
17	MS. HUSEMAN: Because our expectation
18	is that farmers do not have certified scales on
19	their properties. So we are using destination
20	weights that are agreed upon between the buyer and
21	the seller. But from a certified weight
22	standpoint, it's really difficult to get two

matching numbers or correlating numbers if you're 1 coming directly off farm and it's not collected 2 3 at a transit facility or if it's railed versed truck, or how products move in such a fragmented 4 space, speaking directly from the grains aspect. 5 6 The correlation I'm sure, you know, Javier, Logan, you guys have much better detail in information 7 on that from the vegetable side so --8 9 MR. POWELL-PALM: Brain, please go 10 ahead. Thank you for that, Kim. This is really, really helpful. 11 12 MR. CALDWELL: Well, thinking about making this work for everybody. I think I'm going 13 to ask questions relating to the many thousands 14 of small mini and micro small scale producers who 15 have nothing to do with bills of lading. And when 16 I deliver almost all my produce by my, you know, 17 I do it myself or an employee does it. And we have 18 of course, you know, invoices and receipts. 19 We have records that we keep. About what how many 20 CSAA shares go out to different locations all that 2.1 kind of stuff. When we used to do farmers market, 22

we would keep records of our, you know, what produce 1 we brought, what produce we either gave away at 2 3 the end to donated or brought back. But it's a completely different world. And I hope that we 4 5 can make whatever process we're putting in place 6 here, you know, not be an extra burden to all the 7 small-scale producers of which there actually are many more than there are large-scale producers in 8 9 the organic world. So just want to put that out 10 there. 11 MR. POWELL-PALM: Yes, I think Amy 12 really saw this question because in the discussion document, it only describes bill -- business to 13 business transactions. So if you're 14 selling 15 directly to consumers to end buyers, this doesn't 16 apply to you. 17 Yes, absolutely. MS. BRUNCH: And one 18 other thing to add, you know, a derivative of this 19 discussion document was just determining 20 consistency of what the definition of sufficient means just to kind of get everybody in the whole 2.1 22 community, you know, more or less, using their

1	unique system, but capturing some of these key
2	minimum reporting requirements, doing it, you
3	know, the question was, should it be granular,
4	should be aggregated, you know, just to try to
5	invoke a little bit more clarity there as well.
6	Okay. I'll turn over you, Nate.
7	MR. POWELL-PALM: Thank you for that.
8	Javier, please go ahead.
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L1	
L2	MR. ZAMORA: All right. I think
L3	there's two I see two different issues here.
L 4	Or at least, but trying to we're trying to
L 5	figure out two different things. So if you are
L 6	trying to figure out the mass of the amount of
L7	product that is being grown from a farm. That's
L8	kind of, it's relatively easy because there's
L 9	numbers and there's data that we can go by. If
20	you're a grain grower, certifiers know how many
21	tons. if you're strawberry grower, you kind of know

how many trays of strawberries you grow. That's

1	one thing. I think it's if you are a specialty
2	grower like myself and if you sell to let's say
3	I bring my strawberries to, you know, to a
4	distributor, we have a way to trace our
5	strawberries from the Triple M Ranch (phonetic)
6	or the Maja Ranch (phonetic) with a little sticker.
7	And then we have another number that it's our
8	grower's number that gets input into the lot number
9	that the distributor has. So if there was an issue
10	with our strawberries, there's the number to trace
11	exactly where it's coming from. So but if you sell
12	at a farmers market, there's a way to figure that
13	out too, because you have like Brian was saying
14	load list, you have harvest records, you have
15	designated blocked numbers, designated ranch
16	numbers. So we're looking at two different
17	things. We're looking at the mass amount of
18	product that is grown and we're also looking at
19	traceability. Now, how can we make everybody
20	happy? Or how can NOSB come up with an idea the
21	NOP can enforce? It's going to be hard because
22	we don't have a silver hullet for everyhody but

1	I think we need to differentiate, unfortunately.
2	Yes, if you're a grain grower, it's just one thing.
3	And if you are a specialty crops grower, it's a
4	whole different thing because they can tell you
5	on a block of 12 acres, I can name 30 different
6	crops that I grow. Now, how am I going to be able
7	to trace the rutabaga or the cauliflower, cilantro,
8	tomatillo, cherry tomatoes, and corn and brussels
9	sprouts and bell peppers and broccoli from that
10	block? And not only that, you don't just harvest
11	one-shot. There's several times that you harvest
12	even broccoli, two or three times, cherry tomatoes,
13	ten times. So it's very complicated. But if you
14	if the goal is to understand whether somebody
15	it's or there's some fraud going on, that
16	everything is there for you to identify it. Now
17	when you do that, are you interfering into
18	something that might not be our business into their
19	private privacy of their the farmer? Well,
20	when a certifier shows up, there's absolutely no
21	privacy. They're coming in to check and see how
22	your operation is working. So I think the biggest

1	issue that I've seen in the past and people talked
2	about that is when grains come out of overseas or
3	some other countries and then the paperwork doesn't
4	really, you know we don't really have or the
5	tools are not there in place to really trace
6	everything to the block where things came out of.
7	But if you do have a way or actually identify and
8	whether you know the 400 acres in Colima, Mexico
9	are actually producing 300 tons per acre or lines
10	or whatever it is. So figuring out, it's tricky.
11	But the certifier can go in and really figure out
12	whether what you're saying, it is what is happening
13	at your farm.
14	MR. POWELL-PALM: Let's hear from one
15	of those certifiers. Go ahead, Kyla.
16	
17	MS. SMITH: Yes. I'll just sort of
18	echo some of the things that Brian and Javier said,
19	is that whatever we come up with here, I think it's
20	really important that it is applicable to all
21	sectors. All types of operations, big, small,
22	in-between. Tech, no tech. It aligns with

1	current regulations and pending regulations. And
2	so that's I think where my struggle with this is,
3	is that we know that SOE is coming, and it can't
4	come fast enough. And I know that the intent of
5	this proposal is not to upset that apple cart or
6	and it's to support, but it's just hard to know
7	how it's supporting. Do we need to do more,
8	without knowing exactly what it's going to say.
9	And then the other thing, specifically with bills
10	of lading, it's, you know, it's a transportation
11	document. So I know that there's like other types
12	of audit trail which documents which can be used
13	depending on your type of operation, which is sort
14	of, you know, what my comment was before. But
15	oftentimes, transportation companies themselves
16	are not certified. So the oversight of those
17	of that activity happens on the buyer or the
18	seller's side. And so hence, a little bit of that
19	black box fits in there. Because certifiers,
20	don't have that direct oversight in the way that
21	we do over companies that we certify. So we have
22	to rely on either the buyer or seller operations

Τ	that we do certify to then create that link. And
2	then also again with SOE there again, there are
3	in there going to be increased record keeping
4	requirements. There's also going to be increased
5	cross-checking required to be able to do supply
6	chain audits. So this was going to what you were
7	talking about, Kim, and helping sort of, again,
8	not through line to be able to connect the audit
9	trail across the supply chain. So again, I just
10	say all of this because it's coming and I know that
11	like we want to do more and we want to do things
12	now. And so I just, you know, don't want us to
13	get too far down the path without knowing exactly
14	what is already going to be included.
15	MR. POWELL-PALM: Thank you for that.
16	Yes. Absolutely. Carolyn, please go ahead.
17	DR. DIMITRI: This is very important
18	and it's a very complicated topic, obviously. I
19	just thinking about the producers that are kind
20	of on the edge, should I get certified, should I
21	give up my certification and I think that keeping
22	them in the organic, you know, as certified organic

is really important and I just wonder, as we think
about this, can we think about them and not actually
pushing more smaller scale producers out of organic
into, you know, that fuzzy world of I use organic
practices, but I'm not certified.

6 MR. POWELL-PALM: Appreciate that.
7 Liz, please go ahead.

MS. GRAZNAK: So this actually relays specifically goes to Carolyn's comment, which is I fall within that, you know real small farm category. And the conversations that I have with many growers that I'm in touch with who are on that fence of should I certify, I grow using organic practices, but I don't want to certify. the things that I tell every single person that I hear that argument from is that in the course of my farming career, when I started keeping track in year four of very specific details, lot code information on seedings, transplantings, seedings outside in the field, harvest records, applying lot codes to everything. That's when I became a really good farmer. And those records that I

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started keeping made me much better and much more 1 2 efficient. And even at my very small scale, I keep 3 all of those same -- the same lock codes that Logan on her farm keeps. So I don't personally think 4 that that is or should be used as an argument to 5 6 keep somebody from certifying. That's my 7 perspective. MR. POWELL-PALM: I can't tell you how 8 9 much I appreciate that as an inspector, I think 10 I would say that the record keeping requirements 11 are just good business management requirements. 12 And I think that all around you noticed that the really well run businesses don't have a hard time 13 It's just as both clearly track 14 with records. 15 Javier, please go ahead. together. 16 MR. ZAMORA: Thank you. Liz, it's you 17 know, I'm glad you there's more. It's probably 18 how limited customers and CSAA, but something that 19 has been said and I went to echo this, the amount 20 of smallest grower, the smaller growers, that are disappearing or not certified organic anymore, 2.1 22 this is one of the biggest reasons because they

1	don't have the HR behind them that can keep track
2	of every little detail. Again, it's not that
3	difficult because it's just business. But there
4	is a load of work that needs lots of work that
5	needs to be done. I can tell you that I have two
6	people to take care of that. Just my CCOS, my
7	organic certification, and we still struggle
8	because we are so diverse. I grow from 75 to 150
9	varieties of flowers. I grow 40 different crops.
10	And that's why did I do that? Because that's
11	the only way for me to compete with a larger grower.
12	If I have some flamingo strawberries and some mar
13	de voir that are different than the massive amounts
14	of strawberries that are grown. That's the only
15	reason why I'm still in business. And that, I can
16	tell you that my customers we've been dealing with
17	them for, you know, the 25 customers for the last
18	7, 9 years. And if I went non-organic. I probably
19	wouldn't lose them all, but I will lose some because
20	I have to have the seal in order for me to sell
21	to the school district. So there's a lot of
22	limitations to how far your organic certification

1	can go to keep the new small family members farms
2	available and being kept as an organic producer.
3	I mean, this is the Santa Cruz area, the
4	Watsonville. Now at the farmers market, you can
5	count how many certified organic operations are
6	there.
7	MS. GRAZNAK: Yes. Can I
8	MR. ZAMORA: Ten years ago was not the
9	case. You can count how many they weren't
10	certified. So something is happening that we need
11	to make sure that we were not going to find a silver
12	bullet. But we have to really, really figure out
13	a way. And again, I said it twice. There is ways
14	to do it easily because my door is open when they
15	come. My files are right there, my receipts are
16	there, my sales are there on the whole enchilada.
17	You just have to
18	MS. GRAZNAK: Can I
19	MR. POWELL-PALM: I just want to say
20	one thing real quick. The primary thing we're
21	looking at here is buyers, tracing back to farm.
22	Farmers on the whole look like they're taking

Τ	doing a pretty good job tracking that information.
2	It's really this connector, Javier, rather than
3	putting on farmers, it's far as how do we get what
4	the farmers are already doing to track over to the
5	buyer? Amy, please go ahead.
6	MS. BRUNCH: Actually, I'll defer to
7	Liz and then I'll get right in there at the end.
8	Liz, if you want to make a comment.
9	MS. GRAZNAK: I'm good. I'm good.
L 0	Thank you very much, Amy. And thank you, Nate,
L1	for clarifying the specificness of this actual
L2	discussion document. Yes,
L3	MR. POWELL-PALM: Absolutely. Yes.
L 4	To the to speaking to those very small producers
L5	that primarily going direct to consumers.
L 6	MS. GRAZNAK: Right. Yes. Yes.
L7	MR. POWELL-PALM: This would have
L8	nothing to do with them.
L 9	MS. GRAZNAK: Correct.
20	MR. POWELL-PALM: It's really business
21	to business. Fraud exist more in the business to
22	business space. Where we have aggregation, where

isn't where this is targeting. I will turn it back 2 3 to you, Amy. MS. BRUNCH: Okay. Well, I'm grateful 4 5 for this extension and this conversation and just 6 the diversity of opinions and thoughts on this. 7 And it isn't an easy subject. And then I appreciate the respect and going over this to find, 8 9 you know, an efficient option. I just point to title of this discussion 10 the document is, 11 Modernizing our system. You know, maybe there are 12 things that we should be -- what data it is being 13 captured and there was a lot of ideas on making 14 things a lot more transparent. What 15 concerning to me is just hearing that a couple of certifiers said out 011t. $\circ f$ all of16 their non-compliances, over 50 percent is because of bad 17 18 records. To me, I think sometimes we stay, let's 19 just let the farmer come up with whatever system 20 they want. But I'd rather not see that system not 2.1 be sufficient enough. So, you know, а 22 transition farmer, that's coming from а

we have longer supply chains. Direct consumer

1	conventional world, record keeping to this level
2	is really ambiguous. So it's actually can be
3	helpful to tell them, you know, some of the minimum
4	ways to
5	MR. POWELL-PALM: Oh, no. We lost you
6	again there, Amy.
7	MS. BRUNCH: Sorry.
8	MR. POWELL-PALM: That's okay. I
9	think I'm not hearing you. Yes.
L 0	MS. BRUNCH: Yes. So that I mean,
L1	that's then I appreciate the discussion. I'm
12	finding the pain points and seeing if there's
13	opportunities to optimize. In terms of these two
L 4	subject matters, in particular, acres on
L5	certificates actually does not look like it's in
L 6	a scope of SOE. So potentially we could look to
L7	decouple these two ideas and have potentially two
L8	formats going forward on these particular
L 9	initiatives instead of combining them because they
20	are two different subject matters. Just to help
21	shore up some of the gaps that have been identified

by other stakeholders. But with that, and I want

1	to deliver too much longer. I minute turned it
2	over to Nate to wrap this up if there's nobody else
3	to discuss anything.
4	MR. POWELL-PALM: I just wanted to
5	thank you, Amy, for flagging this for us. As we
6	see how many people had thoughts about this, I'm
7	really glad we have the chance to circle back.
8	So thanks for putting this back on our agenda.
9	All right. So folks on the whole, that pretty much
LO	wraps things up. We're going to go over the work
L1	agenda now for our upcoming semester. And then
12	we will end with a welcome to our new members.
L3	So if we could project the work agenda, and we'll
L 4	just go through by subcommittee, and I apologize,
L5	would you mind making it just a bit bigger, a little
L 6	bit more zoomed in. Great. Thank you. So
L7	continuing from oh, yes.
L8	MS. SMITH: I just want to interrupt
L 9	you just for one second so you know, the yellow
20	highlighting are the ones we sent back from this
21	meeting. So they're back on the agenda for the
22	fall. I presume.

1	MR. POWELL-PALM: Perfect. Thank
2	you. So for the fall our meeting in Sacramento,
3	hopefully, our first in-person meeting in awhile,
4	we're going to likely have a proposal for oversight
5	improvements to deter fraud. That which we just
6	discussed. A lot of that fall for that. Human
7	capital management NOSB technical support will go
8	to a vote. And then we'll also have a proposal
9	on organic and climate-smart agriculture, which
10	I am stoked for. So being able to dive in and take
11	a vote on how we can better articulate how organics
12	fits in this space. NOP risk mitigation tables,
13	we will be working on again this semester that we
14	sent back. And then moving into crops. So carbon
15	dioxide send back, it will still be on our work
16	agenda to vote on in the fall. We are going to
17	have a pile of material votes. Spring always seems
18	easier when I look at the small agenda. So I hope
19	everyone enjoyed our warm-up session because it's
20	going to be a marathon of voting on all these
21	materials we went over will go to a vote. So I
22	won't read them all off. You can see them as we

1	scroll through here. And we're going to be moving
2	through crops and then we had in handling sent
3	phosphoric acid back. So we'll be working on that
4	this semester as well. If you want to slow scroll,
5	please. We'll be voting on all the materials about
6	what you heard this meeting. So really excited
7	to have some questions that we post back to the
8	community in your fall comments, and to hear from
9	you on these things. Livestock will have those
10	material votes. In the materials subcommittee,
11	we're going to have our tall oil, so DTO votes.
12	It's a discussion document now excluded methods.
13	And then moving into our research priorities about
14	which we discussed. And then our PPM updates.
15	And is that the end there? Did we just fly through
16	all those? Please go ahead, Wood.
17	MS. ARSENAULT: You can move through
18	them and I'll read them.
19	MR. POWELL-PALM: I guess, I'll just
20	scroll and don't read everyone all, they post
21	quickly.
22	MR. TURNER: There were a couple of

1	things I noted there, Nate. So there was you
2	as you were going through the votes, there was an
3	L-malic acid discussion that I think you may have
4	higher up on the list, you might have seen
5	MR. POWELL-PALM: Thank you. If we
6	can scroll back to that.
7	MR. TURNER: And also to my question
8	about BTO. Do we indeed have a vote in the fall
9	or is that no longer on there?
10	MR. POWELL-PALM: Super good question,
11	I would say for now, it's listed as a vote in the
12	fall, so just by procedure, we've done discussion
13	document and then likely a normal procedure goes
14	to proposal. I think it'll be a discussion with
15	the program to see if we do have a path forward
16	and we'll be able to update the community after
17	that.
18	MR. TURNER: Okay.
19	MR. POWELL-PALM: Thank you for that
20	question. Carolyn, please go ahead.
21	DR. DIMITRI: Nate, is it out of order
22	if I say something about climate change?

1	MR. POWELL-PALM: If you wouldn't mind
2	in just one second, hold it off.
3	DR. DIMITRI: Okay.
4	MR. POWELL-PALM: We'll conclude the
5	agenda review and then we can go into other
6	business. So please standby. Any other
7	questions or comments on our agenda?
8	MS. ARSENAULT: Maybe
9	MR. POWELL-PALM: Yes.
10	MS. ARSENAULT: Added that line item
11	onto your work agenda. So it may be in the CACS
12	section at the top. Climate-Smart here we go.
13	If Carolyn wants to address it here.
14	MR. POWELL-PALM: Sure. Yes. Let's go
15	ahead. If you'd like to talk about it, Carolyn.
16	DR. DIMITRI: I just have two very fast
17	things to say because I see that we have coming
18	up for a vote in the fall meeting, So I just wanted
19	to let people know that we'll probably we'll
20	put something out on the open docket for comments
21	before then, so they will have a chance to give
22	input and then also if anyone has any thoughts about

climate change in organic and they want to talk 1 2 to me, they can just reach me through my NYU e-mail 3 address, and I'll be happy to talk to anyone who has an interest in the topic. 4 Thank you for that. 5 MR. POWELL-PALM: 6 I would also just put out to the community if anyone is applying for Climate-Smart agriculture 7 grants as part of this billion dollars for 8 Climate-Smart commodity solutions, please e-mail 9 I would love to know what the community is 10 me. 11 doing out there and how we might inform the writing 12 of this document to reflect the hard work that's 13 going on and the ideas that are already being implemented and explored through that grant part 14 15 making process. So please be in touch. 16 All right. So that pretty 17 concludes our review of our upcoming semester's 18 agenda. Any other questions from folks? Hearing 19 Great work through the deferred votes. none. 20 It's our chance that normally we would welcome our new members now. 2.1 And I think that we have, you 22 know -- we can't express how excited we are to have

1	you four with us. This is really a great honor
2	to have your expertise and really just by show of
3	this meeting, how ready to run you all were. It
4	was kind of a late appointment. You all arrived
5	and got your letters a little bit later than might
6	be optimal, but you have just thrown yourselves
7	into the work. So I can't thank you enough for
8	that and for the insights and deep respect for the
9	community that you brought to this meeting. So
10	the community thanks you, your fellow Board members
11	thank you. And, hopefully we get to see you in
12	the fall. It's so you won't have nearly as long
13	of a delay in getting to meet your fellow Board
14	members as my class and the class after us have.
15	And I think that's going to be a really special
16	opportunity to see you all in person. So thank
17	you so far for your service and for your
18	participation and for all of your respect and the
19	dignity you give to this process. Any other
20	business? Any other questions, ideas? Brian,
21	please go ahead.

MR. CALDWELL: Well, first I feel like

1	I want to apologize to everybody else on the Board
2	because I feel like my role here has been to give
3	everybody else more work. And just to turn that
4	around a little bit. I just wanted to say that.
5	If we can make it some sort of an effort on moving
6	the inerts question forward. I would be very happy
7	to work on that no matter
8	MR. POWELL-PALM: Please go ahead,
9	Brian.
10	MR. CALDWELL: Oh, just no matter what
11	committee may get it, I would be glad to really
12	help on that, because it just seems like such a
13	quagmire for us. So just wanted to put that out
14	there.
15	MR. POWELL-PALM: Thank you. I think
16	it's telling me an all hands on deck. So this is
17	an issue of our day to try to figure this out across
18	subcommittees. So appreciate your work there.
19	Kyla, please go ahead.
20	MS. SMITH: I would just say that we're
21	just we're in a bit of a holding pattern though.
22	Until the program put out that ANPR, who already

1	like handed inerts like back to them. And so until							
2	like they put out that advanced notice of proposal							
3	making and the ideas come back in, then they have							
4	to sort of sort out what those maybe and then it							
5	may come back to us. So I really appreciate your							
6	enthusiasm, Brian, and hopefully it doesn't take							
7	too long for that to get rolling. If it should							
8	come back to the Board and that you're still on							
9	the Board because it happens so much really, you							
10	know, carry that as the torch bearer would be hugely							
11	helpful.							
12	MR. POWELL-PALM: Thank you for that.							
13	Absolutely. Any other closing thoughts? Well,							
14	we've said it before you all are the best. This							
15	is really has been a great meeting. Thank you so							
16	much for the time and energy put into this. And							
17	Michelle, please go ahead.							
18	MS. ARSENAULT: I don't want to							
19	interrupt you, you want to finish your thoughts?							
20	MR. POWELL-PALM: I can finish my							
21	thought. I think it was representative of really							
22	hard work done throughout the year throughout							

1	this last semester to hit so many 15 to 0 votes
2	where folks felt informed, conversations had been
3	thorough, the work and the homework had been done.
4	So I think that is really reflective of a process
5	working well. And so, thank you. There's a lot
6	of calls. I think the community might not quite
7	understand how many hours go into this. But it's
8	an easy 15, 20 hours every week, both in committees
9	where we're meeting formally but informally with
L 0	conversations between each other. And and it all
L1	is very shiny when we get to this point, but it
L2	is an extraordinary amount of work. And I just
L3	want to commend all of my fellow Board members on
L 4	taking the time away from your jobs, from your
L5	families, in support of our community to make our
L 6	community what it is. So thank you again.
L7	MS. ARSENAULT: Hear, hear. I just
L 8	want to oh, go ahead, Nate.
L 9	MR. POWELL-PALM: No, please go ahead.
20	MS. ARSENAULT: I just want to mention
21	two quick things then I'm going to turn it over
22	to Jenny as the designated federal officer to go

1	ahead and close the meeting. But here are the							
2	things in my brain. So we will have a nomination							
3	coming up this year. We're waiting for the							
4	announcement to get approved so we can get it posted							
5	in the federal register. We will have one vacancy							
6	to fill come January of 2023. So the announcement							
7	should be out in the spring of this year. And							
8	that's Rick who is leaving us in January of 2023,							
9	he's in the environmental protection and resource							
10	conservation seat. So and then next slide, Jared.							
11	Thank you. Just I think you guys have seen							
12	the same slide now for a couple of meetings. Not							
13	much movement here, but we are slated to be in							
14	Sacramento in the fall. Still working on the							
15	spring 2023 meeting and the fall 2023 meeting we're							
16	slated to be in Providence, Rhode Island. Allison							
17								
18	MR. POWELL-PALM: Yes. Allison,							
19	please go ahead.							
20	MS. JOHNSON: I just wanted to make sure							
21	we get one more big thanks sent to Michelle. You							
22	made it so easy to slide into this group and make							

1	sure we have everything we need. So thank you.						
2	MR. POWELL-PALM: I can't echo that						
3	enough. Man, thank you, Michelle.						
4	MS. JOHNSON: And the treats. I loved						
5	the treats.						
6	MR. POWELL-PALM: Even though we're						
7	virtual, Michelle still got us treats. That						
8	should say something about a really effective						
9	manager. So thank you, Michelle. That was yes,						
10	you're incredible. And you made this work						
11	possible. All right. And with that, I'll hand						
12	it back to Jenny.						
13							
14	DR. TUCKER: All right. I want to						
15	thank the entire Board for a wonderful meeting,						
16	incredible discussions, incredible group. I also						
17	want to thank the National Organic Program team.						
18	I do want to close with a kind of behind the scenes						
19	project that has been going on for months that we						
20	are now able to launch and actually launched this						
21	afternoon during the meeting. So I just want to						
22	point it out for the looks like we have 86						

1	diehards that are still on the line with us as well
2	as the Board. Today looks like I'm not allowed
3	to share my screen or I would share it for you.
4	Today, we launched a new petition substances
5	database so for all the folks out there who are
6	involved in materials, reviews, and who are
7	tracking all of these substances through the sunset
8	process, all the detailed technical work that
9	happens in these meetings, our technology is a huge
10	enabler to everything we do and so the team heard
11	you about the need for a better online index for
12	managing petition substances. And Andie Holm, has
13	led this project for the last several months. So
14	Andie, I just clicked it in, chatted it in so you
15	can double click on it, scroll down to see the
16	National Petitioned Substances Database. But I
17	did want to highlight both that is a tool, but also
18	the behind the scenes work that happens as Nate
19	just mentioned with the entire Board, but also
20	across the standards division and elsewhere. We
21	are one big global partnership and if technology
22	is important for binding us all and the people are

important for making the work happen. So again, 1 thanks. 2 congratulations and And Nate 3 Powell-Palm, thank you for your leadership during this meeting and as the Board chair, you did a 4 fabulous job as your first virtual meeting and 5 you'll do another fabulous job in the fall, ideally 6 7 in face-to-face, where we will all be able to give each other hugs at this point in the process. 8 So 9 with that, I think we are going to formally adjourn this meeting of the National Organic Standards 10 11 Board with many, many thanks and well wishes for 12 a safe and happy and smooth path forward. well wherever you maybe and take good care. 13 14 bye. 15 MR. POWELL-PALM: Thank you, Jenny, 16 Thanks, Jenny. MS. SMITH: Maybe at 17 the fall meeting, there will be less issues with 18 the microphone un-muting and muting because we've 19 all been having to do that on Zoom for so long. 20 Because that's like just one thing I remember from in-person meetings where everyone is like people 2.1 22 forget to un-mute that.

1	(Whe	ereupon,	, 1	the	meet	ing	in	the	5
2	above-entitled	matter	was	concl	Luded	at	3:30	p.m.)	