UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURE MARKETING SERVICE (AMS)
NATIONAL ORGANIC PROGRAM (NOP)

MEETING OF THE NATIONAL ORGANIC STANDARDS BOARD (NOSB)

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WEDNESDAY APRIL 27, 2011

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The National Organic Standards Board convened at 8:00 a.m. in the Emerald I Meeting Room at the Red Lion Hotel, 1514 Fifth Avenue, Seattle, Washington, Tracy Miedema, Chairperson, presiding.

MEMBERS PRESENT

TRACY MIEDEMA, Chairperson
COLEHOUR BONDERA
STEVE DEMURI
JOSEPH DICKSON
KRISTINE "TINA" ELLOR
BARRY FLAMM
JOHN FOSTER
WENDY FULWIDER
KATRINA HEINZE
NICHOLAS MARAVELL
ROBERT "MAC" STONE
JENNIFER TAYLOR
C. REUBEN WALKER

STAFF PRESENT

MILES McEVOY, Deputy Administrator, National Organic Program

MELISSA BAILEY, Director, Standards
Division, National Organic Program

LISA BRINES, Standards Division, National Organic Program

EMILY BROWN ROSEN, Standards Division, National Organic Program

LISA AHRAMJIAN, NOSB Executive Director

C-O-N-T-E-N-T-S

Crops Committee -
John Foster, Chairperson 5
Livestock Committee -
Wendy Fulwider, Chairperson 192
Handling Committee -
Steve DeMuri, Chairperson 220
Materials Committee -
Katrina Heinze, Chairperson 256
Compliance, Accreditation and Certification Committee -
Joe Dickson, Chairperson 293
Policy Development Committee -
Barry Flamm, Chairperson 311
Meeting Adjourned 322

1	P-R-O-C-E-E-D-I-N-G-S
2	8:02 a.m.
3	CHAIR MIEDEMA: Good morning,
4	everyone. Day 2 of the Spring 2011 meeting of
5	the National Organic Standards Board is now
6	back in session.
7	I'd like to welcome members of the
8	audience who are here today for the first
9	time. Nice seeing so many of you this
10	morning.
11	And something that a few of us
12	were remarking on, is how many NOSB alums
13	there are in the audience today. So, we
14	wanted to recognize NOSB members who have
15	served in the past.
16	Would you be so kind as to please
17	stand and be recognized?
18	(Applause.)
19	CHAIR MIEDEMA: We've got a full
20	day. And so, we're going to go ahead and get
21	started.
22	First committee that will be

reporting back to the full Board this morning 1 is the Crops Committee. 2 Chairman John Foster, would you 3 please proceed? 4 MR. FOSTER: Sure. So, we've got 5 Two hours, right? 6 two hours, correct? 7 have a fairly thick agenda. Lots of things to cover. 8 9 I'm going to ask, Tracy, if you would help mind the time to make sure that we 10 11 can hit each of the items for some period of 12 time? There's going to be some materials 13 that take a little bit longer than others. 14 15 And Crops Committee, we met briefly last night after this meeting, and we talked about some 16 of the materials that are going to require a 17 18 little bit more time. So, be mindful of that as we hit 19 20 the ones that, you know, we have a chance at going through fairly smoothly. Let's hit 21 22 those.

1	This is a discussion day, and we
2	have a little bit more time to talk on Friday.
3	We can certainly meet between now and Friday
4	to smooth out whatever wrinkles we still have.
5	So, I just ask that we can be
6	mindful of that. It's going to be tough to
7	get through.
8	I spent a fair amount of time
9	yesterday trying to encapsulate everything I
10	heard yesterday. And I never get tired of
11	hearing farmers talk about the art of farming.
12	I love hearing that part. It's
13	actually the neatest part for me, is to listen
14	to that. I really appreciate all the comments
15	that were given.
16	It reminds me that there's a lot
17	more to farming than just the hard work and
18	just everyone slinging arrows at you.
19	And you can hear it in the voices,
20	and that was really refreshing for me. Very
21	insignation T much appropriate that
	invigorating. I very much appreciate that.

1	has been focused on sunset review, a couple of
2	petitions and a couple of materials, but a lot
3	of our discussions have been around sunset and
4	I just had a couple things I wanted to throw
5	in here in preparation for discussion.
6	One is that it's a real
7	opportunity for the community, the industry to
8	really think about renewal and review, taking
9	stock taking chances.
10	A lot of us take chances in
11	committee meetings, and there's a lot of
12	facets here. A lot of interested parties.
13	And we've heard from a lot of
14	those in public comment. A lot of the
15	parties, a lot of the facets, and I appreciate
16	that.
17	One thing I was not hearing that I
18	just wanted to throw out in preparation for
19	discussion was that it's - I think it's really
20	easy to forget that materials exist only in
21	the context of a whole.
22	And in - that they're used as a -

any single substance, any single material is relatively minor relative to the whole of farming.

And that's what I was reminded of yesterday in public comment, that farming is a big thing. It's a big job. It's a big task, and any one material plays a very small role.

It's not that materials play an immaterial role, it's just that any one plays a minor role. And I think it's important to keep that in context as we talk about it, as we talk about each material, because it's easy to forget when we're talking as we have a lot about molecules and bonds, all important things.

But in the context of the whole, it takes on a new meaning and a richer meaning. And I don't want to lose that, because that was the thing that actually got me into organics twenty years ago is remembering that it's a whole deal and not to

get overly too focused on the too small. 1 2 That's all. 3 So, the kind of format here, I'm going to ask each of the committee members 4 that kind of headed 5 up the review, research, took a point on TR review, developed 6 7 the checklist, to take each material. But I would like just for the sake 8 9 of organization, would like to take them in order on the agenda. And I'm - Crops 10 11 Committee, please chime in if you see this 12 differently, but my understanding is we're going to probably spend a little more time on 13 tetracycline. A little more time on 14 15 streptomycin. Likely a little more time on Perhaps pheromones, sulfur dioxide. 16 ethylene. 17 And then of course my personal 18 favorite, sodium nitrate and corn steep 19 liquor. 20 Unless there's objections from the Committee, I would just ask, Jay, if you could 21 22 start on tetracycline.

MR. FELDMAN: Good morning, 1 Great place to begin the 2 everybody. 3 discussion. Dive right in with the hard stuff. 4 I put a little PowerPoint together 5 to give you a sense of where the Committee was 6 7 at on this issue when it made its decision, and then sort of reflecting back on the 8 9 history. And I'll integrate with this, some of the comments that I heard and read. 10 issue 11 So, the biq for this 12 question as John said, this is a tool. It is not sort of the central issue in growing 13 apples and pears, which is what we're focused 14 on with the use of this antibiotic. 15 16 It is an input in a system. all know, the organic system. 17 So we have, as John said, keep that in mind. 18 19 But as we're having this 20 discussion here in this room, what the Committee became acutely aware of was that 21 22 there's this larger discussion going on around

us in academic and scientific circles about 1 antibiotic resistance. 2. And you can see that, and this is 3 the cover of a CIBA Foundation symposium on 4 antibiotic resistance. 5 It's huge issue, 6 and the 7 Committee struggled with how we related to that as a community. 8 9 Were we exacerbating the problem? Were we recognizing the problem and trying to 10 11 do something about it? 12 So, basically the conclusion that you come to pretty quickly when you look at 13 the literature, is that antibiotic resistance 14 15 is an important threat to human health, and that it's costly in society not only in terms 16 of human health costs, but in terms of our 17 18 ability to protect the public health. Over time there's been a three-19 20 fold increase in mortality. I'm not going to go through all these slides, but just I'm 21 22 picking out the highlights.

And the economic cost to the US is 1 estimated between 150 million and \$330 billion 2 3 a year depending on the number of deaths and the way you calculate it. 4 Antibiotic resistance in human 5 increased not only by the 6 pathogens is 7 pathogen's exposure to antibiotics - so, in other words, our individual exposure that we 8 9 may get as a result of eating something that may have a residue - but also the pathogen's 10 11 exposure to other bacteria not necessarily 12 related that become resistant. what we're seeing 13 So, is horizontal gene transfer. And once you put 14 this antibiotic out in the environment, you're 15 creating resistant genes that move laterally. 16 17 And the movement of the genetic 18 material from one organism to another is the 19 primary mechanism by which bacteria acquire 20 antibiotic resistance. antibiotic 21 Spraying increases 22 resistance in bacteria exposed such as

bacteria in the soil or on plants. 1 And here's an article that 2 3 looked at, Emergence, Spread and Environmental Effect of Antimicrobial Resistance. 4 Use of an antimicrobial anywhere 5 can increase resistance to any antimicrobial 6 7 anywhere else. And this is the difficult concept 8 9 to get a handle on that when we're putting this out in the environment, we're causing 10 11 this - we're escalating the problem that we're 12 strugaling with. So, we put - as you've got in your 13 packet, we put together the environmental -14 the evaluation criteria checklist. 15 went through all that. And we can circle back 16 to that if people have questions. 17 18 What. has continued to allow 19 antibiotic use done for fire blight management 20 in organic apples and pears? again, depending 21 Well, on 22 perspective, we have either sort of created

the problem, or we're managing the problem. 1 I quess what we heard in the 2 3 testimony is that the antibiotic is managing the problem. 4 other perspective 5 The to think about for a moment is that we in our decision, 6 7 may have - may be contributing to the problem. Because what happened is knowing we have this 8 9 tool, it appears as though it supported this growth of these varieties. And here you can 10 11 see the growth in Washington State of Fuji, 12 Gala, Granny Smith, which are the big ones. Regardless of whether it's by 13 14 consumer demand or grower response to the 15 consumer demand or whatever reason it may be, 16 the fact remains that we have supported this. This 17 is supported. This transition to these varieties is supported by 18 19 the fact that these antibiotics are out there. 20 So, when you look around in the literature -- Purdue has looked at this - you 21 22 come up with this sort of list of varieties.

We heard referenced yesterday that 1 some of the varieties that are highly 2 3 resistant. And here, they're listing Winesap all different Jonafree and these 4 and varieties. 5 We heard about 6 some others 7 yesterday as well. One person characterized them as inedible. 8 9 So, you know, you're facing this question of whether these resistant varieties 10 11 are what consumers will buy and how we educate 12 consumers about that. But the reality is wherever you 13 look in the literature, and I think this was 14 established in the testimony, and nobody sort 15 of disagreed with it, said the varieties we're 16 planting and that 17 are most common in the marketplace highly-susceptible 18 the are varieties. 19 And here, this supports that as 20 well. organic producers 21 So, do and 22 marketers need to follow the lead of chemicalintensive growers, or shouldn't we market based on our strengths?

And this is both a philosophical question, but it's a question that we face with a lot of materials in terms of the appropriateness of introducing a material relative to the particular species or the seasonality of food production or whatever we're looking at in terms of manipulating nature responding to problems.

Which would you choose? And this goes to the consumer question that was raised yesterday. I am just as good as Gala, but I'm resistant to fire blight. So, no one sprayed me with antibiotics.

And here's the Gala. You know my name, but you don't know that I'm sprayed with antibiotics.

So, you know, someone came up to me yesterday and said, well, again, this is a very small use relative to all other organic practices. And my consumers understand that

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I'm a responsible user of this material, and 1 that may well be. The organic consumer might 2 3 respond that way. I think in a larger context where 4 people are more removed from their farmer and 5 shopping in an urbanized area and they go pick 6 7 up a Gala, I suspect - I don't know what your sense is on this, but I suspect they don't 8 9 expect it to be sprayed with antibiotics. the petition comes 10 So, here's 11 along. I want to give you the history. 12 We received this petition from the Washington State Horticultural Association. 13 And they want to amend the Annotation 205.601 14 15 which allows tetracycline for fire blight control only - and for use only until October 16 17 21, 2012. The Crops Committee requested, but 18 19 did not receive prior to adopting its 20 recommendation on tetracycline updated TR, but what we had was a 2006 TR, we had a 1995 21

Technical Advisory Panel review.

The Committee proceeded based on 1 its own research pending the receipt of a new 2 3 TR which will be reviewed, and then I've added to this, and was received and reviewed by all 4 of us on April 1. So, we did actually receive 5 the final updated TR on April 1. 6 7 if you feel confused Now, conflicted about this, I think you'll be 8 9 supported by the history on this chemical. So, I want to run through the history quickly. 10 11 First approved in '95, 12 tetracycline and another antibiotic, streptomycin, which we're going to talk about, 13 the issue of engendering antibiotic resistance 14 in human pathogens in workers was raised at 15 that time in the 1995 review. 16 TAP The 17 annotation permitted for fire blight. 18 Streptomycin antibiotics were to 19 be reviewed again in two years and there was 20 task force to further explore be а antibiotic use in fruit production. 21 22 '98, the proposed rule would

have allowed antibiotics is pesticides. 1 There was public opposition to that. 2 3 When USDA published the next draft rule in early 2000, it removed the NOSB 4 recommendations allowing strep and tetra in 5 order to be consistent with the prohibition of 6 7 antibiotics. antibiotics The two 8 were 9 reinstated, however, in the December 2000 final rule. So, that's a pretty interesting 10 11 piece of history. 12 The Board discussion regarding the 2006 Sunset included concerns about promotion 13 of resistance - same discussion we're having 14 15 today - natural substitutes, inconsistency 16 with the prohibition of antibiotics in inconsistency with organic 17 livestock. principles, disagreement with the prophylactic 18 19 use of antibiotics, the Centers for Disease 20 Control and Prevention opposition to the use 21 of strep and tetra in crop production.

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Board discussion

regarding 2006 Sunset included failing to give 1 an incentive for alternatives - we've been 2. 3 discussing that a lot - reaction against organic fruit by consumers, possibility - this 4 is all in the historical record - possibility 5 that antibiotics might be taken up by the 6 7 fruit - we've actually come across literature which we've cited that shows translocation in 8 9 the fruit, and low levels in the finished fruit mostly in the core and the peel - need 10 11 for more research, restrictions on sale of 12 fruit in Europe, disruption of the organic 13 system. The NOSB in 2006, also discussed 14 15 the lack of data showing impact on resistance. People, you know, back then it wasn't as clear 16 as it becomes as more literature comes out. 17 18 And of what. course we hear 19 consistently is dependency of growers on these 20 materials. The Board vote 2006 after 21 22 expressing concern about the wish that someone might petition to remove them sooner than the next Sunset, the two antibiotics were renewed with a vote of seven yes, four no, one abstention and two absent. And you'll note that this is not a two-thirds yes vote.

In November 2008, the Board took up a petition to add a second form of tetra by removing tetracycline annotation that limit its use to oxytetracycline calcium complex.

This would have reset the clock on tetracycline. However, and many of you sitting around the table remember this, however, because there was a general belief that tetracycline could be phased out, the Board voted down the proposal and - sorry, wrong way - and then entertained a motion to reconsider, which resulted in adding the hydrochloride to level the playing field, and ultimately the adoption of the annotation which we have before us today, which is the expiration date of October 21, 2012.

Thus seeking, I mean, this is what

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intended, to prevent any additional 1 was extensions of the Sunset period. 2 3 So, just imagine sitting - well, some of you don't have to imagine. You can 4 But imagine sitting at the table 5 remember. back then having this very same conversation. 6 7 Findings of our committee. The Crops Committee was presented with evidence 8 9 that tetracycline can contribute to antibiotic resistance. At the same time, additional 10 11 products are available to use against fire 12 blight. We heard yesterday about efficacy 13 problems with 14 that. But, 15 nevertheless, they're out there. still ongoing research. 16 majority of 17 the Committee The 18 believes that the first line of defense is the choice of resistant varieties and rootstocks, 19 20 a concept that the Committee majority believes is a critical organic principle essential to 21

disease or pest prevention in organic systems.

Despite this, the pattern of 1 growth in organic apple and pear varieties in 2 3 certain areas of the country has been skewed toward those varieties most susceptible. 4 And that's what's challenging 5 about this. We don't - I don't think anybody 6 wants to do that. 7 2010, the leading organic In 8 9 apples, we've already said this, Gala, Fuji, Granny Smith, 54 percent of apple production 10 11 acreage highly susceptible. 12 The leading varieties in organic pear productions were Bartlett - you can see 13 the rest here. Eighty percent of organic pear 14 15 acreage again most susceptible to fire blight. hand, 16 On the other there numerous apple and pear varieties that are not 17 susceptible to fire blight. We heard they're 18 19 inedible, yesterday. 20 The majority of the Crops Committee recommends against the adoption of 21 22 the petition amend the listing of to

tetracycline by removing the expiration date 1 on tetracycline so that the listing could stay 2 3 tetracycline for fire blight control only, thus allowing tetracycline's use to expire. 4 And that was by the deadline set in 2008. 5 that was by a vote of five no, because we 6 7 these motions in the affirmative, absent two. 8 9 Now, of course as John mentioned, ongoing discussion 10 there's as to how 11 balance all of this. Given what we've heard 12 and what the realities are on the ground, we haven't yet worked that out, but I wanted you 13 all to understand what we had discussed in the 14 Committee. 15 And I really would appreciate any 16 17 input from any other Committee members. 18 you. 19 MR. FOSTER: Thank you, Jay. 20 I want to go straight to - Tracy, understand you have a specific kind of 21

question protocol in place, or do you want to

1	keep this straight presentation at this time?
2	CHAIR MIEDEMA: Let's just proceed
3	with presentations. And if we start getting
4	into, you know, way over time, then we'll need
5	to impose some of the restrictions.
6	MR. FOSTER: Okay. Thank you.
7	We're going to move -
8	MS. ELLOR: I wanted to add to what
9	Jay said, and there have been further
10	discussions in the Crops Committee about, you
11	know, how much progress has been made since
12	this last deadline was set.
13	And there definitely has been
14	progress, so, you know, we've been talking in
15	committee about, you know, further steps we
16	can take to possibly give more time.
17	CHAIR MIEDEMA: Katrina.
18	MS. HEINZE: I'm a little unclear
19	on our discussion process at this point, I'm
20	sorry, because I know it's a change.
21	Is the Crops Committee going to
22	present all their things and then we're

1	discussing everything at the end, or are we
2	discussing them after each one?
3	How do you want to proceed?
4	CHAIR MIEDEMA: You know, that's
5	really the purview of the Crops Committee
6	Chair.
7	MR. FOSTER: I think in the
8	interest of covering everything we should
9	right now, I'd rather go through - go through
10	item by item and I think they'll self-
11	prioritize for discussion.
12	Is that all right?
13	Yes, only because it's a long list
14	and I worry that the bottom half won't get
15	covered at all.
16	MR. FELDMAN: John, I would say if
17	there are any burning clarification questions,
18	it might, you know.
19	CHAIR MIEDEMA: I have one.
20	Yesterday it was pointed out to us that this
21	material is called oxytetracycline.
22	Did that come up in your research?
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1	I just want to make sure that for
2	the record we're calling this material -
3	MR. FOSTER: Yes.
4	CHAIR MIEDEMA: by its proper
5	name.
6	MR. FOSTER: That's what we're
7	talking about. Sorry.
8	Okay. Moving on quickly to
9	nickel, nickel was - this is a petitioned
10	item. It's the second of two petitions in
11	front of the Crops Committee.
12	Nickel has been petitioned to
13	initially just be added to the National List.
14	It was later - the petition was later amended
15	to add nickel to the existing list,
16	205.601(j)(6)(ii), to which - a list that
17	already includes the sulfates, carbonates,
18	oxides or silicates of zinc, copper, iron,
19	manganese, molybdenum, selenium and cobalt.
20	Nickel - I took point on this:
21	Nickel was fairly recently recognized as an
22	essential micronutrient by various agencies

1	that are all in the petition materials, and
2	wasn't on the list of essential micronutrients
3	at the time that the others were added to the
4	National List.
5	So, the use has particular utility
6	for pecan orchards. My understanding is that
7	the physiology of pecans, other nuts too, but
8	pecans particularly, is such that the nickel
9	ions do not translocate particularly well.
10	So, you can have nickel in the
11	soil that doesn't get to the crop itself,
12	causing something called mouse ear and greatly
13	diminish the yields.
14	All of the petition materials, the
15	actual petition submitted by Rich Theuer, was
16	quite thorough, I thought. And unless there
17	are specific questions for clarity, I'll move
18	to the next item.
19	Questions?
20	(No response.)
21	MR. FOSTER: All right. Then next
22	up was chlorine. Give me a minute to take my

thumb off the button and find it. These are 1 now moving into Sunset materials. 2. 3 Chlorine as a - it's listed on 205.601(a) as an algicide, disinfectant and 4 sanitizer, irrigation system 5 including cleaning systems. 6 7 The material - the three materials that pulled out specifically in are 8 9 listing are calcium hypochlorite, chlorine dioxide and sodium hypochlorite. 10 11 There's a lot of chemistry in the 12 first part of the recommendation, but where most of our discussion focused was, generally 13 speaking, the Committee felt it should remain 14 15 on the list. However, with an alternate annotation to bring into better alignment with 16 17 NOP's draft quidance. 18 Wanting to make those two things 19 more consistent seemed like a good idea to us. 20 And so, the Crops Committee recommended relisting chlorine compounds with a change to 21

the annotation in the following way:

1	Chlorine materials, and then
2	parenthetically, calcium hypochlorite;
3	chlorine dioxide and sodium hypochlorite,
4	wherein the residual chlorine levels in the
5	water in direct crop contact or as water from
6	cleaning irrigation systems applied to soil
7	should not exceed the maximum residual
8	disinfectant limit under the Safe Drinking
9	Water Act.
10	Chlorine products may be used up
11	to maximum labeled rates for disinfecting and
12	sanitizing equipment or tools.
13	And, again, the intention was to
14	bring this into alignment with NOP's draft
15	guidance. The vote was five yes, zero no and
16	two absent.
17	Any questions on that?
18	CHAIR MIEDEMA: Nick.
19	MR. MARAVELL: John, on the wording
20	there it said the maximum residual - I can't
21	look backwards and forwards at the same time,
22	but should not exceed.

1	Is that the proper word or are we
2	looking for "shall not exceed"? I just don't
3	recall how we wanted to portray that.
4	MR. FOSTER: I'm trying to find it
5	here in the - yes, it does say right now, says
6	"should not exceed." That may not be the most
7	appropriate word.
8	MR. MARAVELL: Okay. That's fine.
9	Just if you take note of that?
10	MR. McEVOY: Hello.
11	CHAIR MIEDEMA: Miles.
12	MR. McEVOY: Yes, we have a
13	question concerning this proposed annotation
14	change.
a =	
15	The Livestock Committee has
16	The Livestock Committee has already approved chlorine for 2012 Sunset
16	already approved chlorine for 2012 Sunset
16 17	already approved chlorine for 2012 Sunset without the annotation change. So, we'd just
16 17 18	already approved chlorine for 2012 Sunset without the annotation change. So, we'd just like the Board to clarify as you move forward,
16 17 18 19	already approved chlorine for 2012 Sunset without the annotation change. So, we'd just like the Board to clarify as you move forward, if you also intend to have an annotation

MS. FULWIDER: It's something that 1 2 we would be happy to discuss in Committee 3 meeting at break. CHAIR MIEDEMA: Go ahead, John. 4 MR. FOSTER: Kind of wrapping up on 5 that, some discussion has been had about the 6 7 use of chlorine in - from 601 in post-harvest handling on farms. 8 9 And that's probably something we need to discuss as - when the time comes 10 11 either in Committee or as a Board as a whole, 12 is clarifying our expectation with respect to which chlorine - essentially which chlorine 13 listing applies to post-harvest use on the 14 15 farm. 16 There is some variability in how 17 that's interpreted from various certifiers. 18 And the intention was that if post-harvest use 19 would pull from a handling definition, because 20 this - the listing here on 601 is fairly 21 specific to other uses in our reading.

was our intention, anyway.

materials, I believe, 1 Next 2 copper. And Jay took point on that. 3 MR. FELDMAN: Yes. You know, going back to the earliest TAP review on copper, 4 there's concern raised about accumulation of 5 copper in the soil and the environmental 6 7 implications of that both to aquatic organisms, but also to toxicity to earthworms 8 9 and fungi, bacteria and most soil animal life. And there is a - in addition to 10 11 that, anyone that's worked around or with this 12 knows that it has to be handled carefully. 13 And that exposure can cause dermal/eye irritation, and can cause health problems, 14 15 respiratory problems, et cetera. 16 The labels on these products that are registered with EPA are pretty strict in 17 terms of personal protective equipment and 18 19 reentry, as many of you know. 20 So, the Committee addressed these two aspects, the environmental implications of 21 22 its use, and the worker protection issues, and

proposed a slight change to the annotation.

On the first issue, it's proposing what we have here, coppers fixed, copper hydroxide, copper oxide, copper oxychloride, includes products exempted from EPA tolerance provided that copper-based - what am I missing here - copper-based materials must be used in a manner that minimizes accumulation, which is what's been in the annotation historically, in the soil and documented through - this is the new part - documented through periodic testing and shall not be used as herbicides.

So, it's that documentation that the Committee is suggesting we require. And the same thing for the copper sulfate. Must be used in a manner that minimizes accumulation, which has been the historic wording, and documented through periodic testing.

On the health effect issue, we didn't - we're not suggesting an annotation, but we are suggesting that we work with the

Program to address this as an issue to be aware of in terms of inspections and oversight of organic farms, that is, that there strict - because of the acute impacts health to workers, and because of the pretty serious label restrictions that we not just that is compliance assume there and enforcement which is technically regulated by EPA and its delegated State agencies, but that we integrate those enforcement issues through program quidance into NOP's quidance oversight of inspection certification. That way, bringing some of questions of human health impacts to workers into the mind's eye and into our focus. I think that would go a long way in offering better protection for those who handle and are exposed to this on the farm. MR. FOSTER: Thank you, Jay. Clarifying questions? (No response.) Okay. MR. FOSTER: Moving on.

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This is both isopropanol and 1 Alcohols. Again, a Sunset item. 2 ethanol. 3 MS. ELLOR: This item actually was one that wasn't too controversial and we are 4 recommending listing - leaving the listing as 5 it 205.601 Synthetic substances 6 stands. 7 allowed for use in organic crop production as algicide, disinfectants and sanitizer, 8 9 including irrigation system cleaning systems, alcohols, ethanol and isopropanol. 10 11 The vote was six yes to keep it on 12 the list, and zero no. We had very little public comment on this. 13 Again, we had one public comment, 14 15 as we did last time, about organic ethanol being available and we did discuss that in the 16 17 Committee, but there's not that much of it 18 available for this purpose. 19 We looked at the original TR, and 20 we also got an updated TR on this through the Livestock Committee. Which, you know, the 21

Livestock Committee requested it.

1	So, I think there's not much more
2	to say about this material, but that we would
3	re-list it as stands.
4	MR. FOSTER: Questions?
5	Clarifications?
6	(No response.)
7	MR. FOSTER: Thank you, Tina.
8	Barry, newspapers. And I believe
9	you also had plastic mulch covers.
10	MR. FLAMM: Yes, thank you.
11	There are three items that I'll
12	make a general statement about this group of
13	newspapers and plastic mulches, but - and then
14	I'll address each one individually.
15	These three materials were put on
16	the list in 1995 apparently by action of the
17	Board, because there's no record of petitions.
18	I'll have to say the record is fairly scanty
19	on these materials. We did request TRs, but
20	these were not received.
21	However, saying that, these
22	materials are relatively non-controversial.

And the points of controversy I'll bring up in 1 2 a moment. 3 Generally on the newspapers, and I want to first say that newspapers has two 4 The first is under essentially as 5 listings. a weed barrier, herbicide, weed barrier mulch. 6 7 And the record although scanty, does not indicate any particular health or 8 9 environmental problem. It's been used by some in organics for quite a long while. So, there 10 11 is no adverse comments on the use of that. 12 The Committee voted six yes, zero no and one absent to continue the listing. 13 The second mulch item is a plastic 14 15 And in this case, we received a number of interesting comments. 16 I'd like to point out the Act 17 itself prohibits the use of plastic mulch 18 19 unless the mulches are removed from the ground 20 at the end of the growing season. And that's 21 where we got comments from people who want to

leave the mulch on the ground.

We also got a number of comments 1 discussing bioplastics partly for the purpose 2 3 of being able just to leave them and have them decompose. 4 And this might be an attractive 5 use at some point, and there's been efforts in 6 7 the past to try to solicit a petition on bioplastics. But that has not come forward, 8 9 and I think there are a lot of issues. example, one commenter who 10 For 11 makes bioplastics, but is using corn, it was 12 not mentioned whether that's conventional corn or not. And of course if it was conventional, 13 it would be GMO, and that raises a whole host 14 15 of other problems. 16 In any case, the Committee did Again, six yes, and zero no, and one 17 absent to continue that use. 18 19 And, finally, the other use 20 newspapers is in composting, and that turns out it's mostly in a sort of auxiliary kind of 21

are mixed with other

use

where

papers

1	compostable materials.
2	And the public comments agreed
3	with the continued use of that material, and
4	so did the Committee. And the vote was the
5	same as on the other materials.
6	MR. FOSTER: Questions?
7	Clarification?
8	It is important to note that the
9	newspapers are two separate listings as Barry
10	pointed out, just to make sure that's clear.
11	Question, Mac?
12	MR. STONE: I just point out that
13	there are agronomic situations where the
14	plastic, you could double-crop it and come in
15	with a second crop behind. Or in our climate,
16	we go into winter harvesting the crop up until
17	freeze.
18	And if it's in good shape, it
19	would be nice to go back in it in the spring
20	without pulling it up and relaying a new
21	sheet.

there are some situations

22

So,

1	where that annotation is a little bit costly,
2	if you will.
3	MR. FLAMM: And if I could comment,
4	that is in the Act itself. So, that presents
5	a unique problem.
6	MR. FOSTER: Thank you. More
7	questions there?
8	(No response.)
9	MR. FOSTER: Moving on, Jay, I
LO	believe you had pheromones. Let's bear in
11	mind we want to leave as much time for
12	question and answer at the - in front of the
13	whole Board, too.
14	MR. FELDMAN: Since this is
15	somewhat controversial, I just put a quick
L6	PowerPoint - this is quicker than the other
L7	one.
L8	Okay. So, what we're talking
19	about here are pheromones. These are alarm
20	pheromones, bring bees to sting an intruder.
21	Aggregation pheromones bring together clusters
22	of butterflies or lady beetles. Ants lay down

trails of pheromones. Many kinds of insects 1 2 release pheromones to attract a mate. 3 Now, when you look for actually talking about in of 4 what we're 5 pheromones, it's such vast number of а chemicals and I just listed some here. 6 7 if you go to this website you see the hundreds of 8 Pherobase, can 9 different compounds that we're talking about. And then they can be classified by functional 10 11 group. 12 I just want to just put these two slides up here to show you the complexity of 13 what we're dealing with here. 14 Pheromones are volatile, effective 15 16 in very tiny amounts as varied as the species that produce them. 17 18 pheromones We use to attract 19 insects to a trap, which has been quite 20 effective. And as we've heard in public important to organic 21 comment, incredibly 22 production.

Attracting insects works with small amounts that insects can follow to the source. And it's also used to confuse insects. Larger concentrations confuse insects because they can't follow the trail.

The pheromones produced by us, these are synthetic chemicals that may be identical to the pheromone produced by an insect or a stereochemical isomer of the chemical produced by the insect, another chemical that the insect recognizes as being the same as the actual pheromone - and this is the key, this next point -- in formulations that usually contain a high proportion of so-called inert ingredients.

So, evaluating pheromone products also means evaluating the inerts. Inert ingredients are not biologically chemical active always. In fact, probably most of the time inert ingredients are those ingredients in the pesticide formulations for which no pesticidal activity is claimed.

That doesn't mean it's not biologically and chemically active, as the next bullet says.

And then, inert ingredients are not disclosed on the product label. So, an individual farmer user doesn't have that information by looking at the label.

Pheromone products then contain a very small amount of volatile chemical that acts like an insect pheromone. A much larger amount of the volatile chemicals that have various uses and effects to dilute, to carry as synergists in many more uses. Other ingredients, as you well know, include glues in cardboard and plastic. So, it's on the National List. It's 601(f) as an insect management tool.

And then we have under - and in that context under 601(m), synthetic inert ingredients are classified by EPA for use with non-synthetic substances or synthetic substances listed in this section and used as

1	an active pesticide ingredient in accordance
2	with any limitations on the use of such
3	substances. And then one is EPA List 4,
4	inerts of minimal concern, which are allowed.
5	And then we also allow in this
6	annotation, inerts of unknown toxicity. And
7	key to this is that inerts are used in passive
8	pheromone dispensers.
9	So, that's in our current law.
10	That's the current annotation, inerts used in
11	passive pheromone dispensers.
12	So, our job obviously in the
13	Sunset is to review these exemptions and
14	prohibitions provided in this section every
15	five years.
16	If you go back in the history of
17	this category of chemical either active
18	ingredients or so-called inert ingredients, we
19	requested a Technical Review, but it was not
20	performed, which is key to this discussion.
21	Even though the inerts are not up
22	for Sunset now, we need to take them into

account. 1 You would think the Board needs to 2 3 - needs an appropriate course of action for dealing with huge uncertainties. 4 So, here are our choices: If the 5 Board chooses to renew the listing with no 6 7 change, then we are not doing our duty to renew them - to review them. 8 Sorry. 9 If we delist them all, then we are removing products that have enabled organic 10 11 growers to avoid much more toxic chemicals. 12 We need to identify a group of pheromone products that are reasonably sure to 13 be safe. That's our goal here. 14 15 Now, when EPA creates its category of so-called 25(b) pesticides, 16 it lists pheromones and pheromone traps, pheromone and 17 18 identical - these are ones that are exempt I'm not going to go 19 from registration. 20 through that. Committee 21 And then the Crops

recommendation is to amend the current listing

of pheromones to read as insect management 1 pheromones provided that they are in passive 2 3 dispensers - and this is what we've added without added toxicants and with only approved 4 inerts. 5 So, let's take that in 6 two 7 sections. Without added toxicants means we're basically holding harmless what is - when 8 9 pheromones first came out, as you remember probably thinking back, a relatively narrow 10 11 group of products. 12 Ιt exploded, and that's has probably thing, 13 а good but we haven't evaluated them. 14 15 The question is we need How are we going to evaluate 16 evaluate them. And what should we do in the interim? 17 them? 18 So, this language is intended to 19 basically hold harmless what's in place until 20 we have a chance to evaluate them rather than triple, quadruple 21 letting the market

whatever during that time frame.

And with only approved inert 1 ingredients, well, all the List 2 3s are 3 currently approved, but this gives us the ability if and when, through the working group 4 and other actions of this Board, we decide to 5 limit List 3 or re-categorize them in some way 6 as EPA has done, then this language will 7 This language will go into effect. apply. 8 9 It will curtail the inerts that we as a Board later on down the road decide to 10 11 curtail. 12 There was one comment that came in that - actually, full disclosure came in from 13 Beyond Pesticides and was endorsed by National 14 15 Organic Coalition -- that would say to or substantially similar 16 identical 17 natural pheromones as defined in the EPA 18 registration. So, that's exempt from 19 something we can discuss tomorrow or later 20 today. OMRI commented on this further. 21 22 We suggest that you consult with EPA on the

definition of "passive dispenser," because 1 2 this has been a question. 3 As many of you may know, OMRI currently understands it to be dispensers that 4 do not come into direct contact with organic 5 6 crops. 7 For example, OMRI has been unable to determine if putty-like 8 а pheromone 9 dispenser intended to adhere to the organic tree trunk can be considered passive. 10 talked to 11 And Ι some growers 12 yesterday, Washington State growers, and the common use here, apparently, is the - are the 13 ties, which I think most of us think of when 14 15 we think of those ties that you put on the branches. 16 17 Now, this just came in recently 18 from an e-mail conversation with Chris Pfeifer 19 who is the EPA rep on the Inert Working Group. 20 He said in the original anthropod defined 21 pheromone rule, EPA "passive

dispensers" as those in retrievable polymeric

matrix dispensers.

As I understand it, the definition was created to characterize the products that were out at the time, and to guard against eco fate issues, plastics, plasticizers littering the landscape.

That was a big concern historically. Passive dispensers are those which emit pheromones by volatilization rather than by spray, and produce a concentration of pheromones in a limited area.

In that session toward the end of our day yesterday, I asked the question as to whether puffers were being used, these are emitters of materials, as opposed to the ties which create their effect through volatility, volatilization.

And the response I got from the Washington State rep or professor was that they are not used at least to his knowledge in Washington State in organic production. Thank you.

1	MR. FOSTER: Thank you, Jay.
2	Clarifying questions? Thoughts?
3	(No response.)
4	MR. FOSTER: Moving along, I
5	recall, is sulfur dioxide. We have Tina, I
6	believe.
7	MS. ELLOR: Yes. And sulfur
8	dioxide turned out to be we thought that it
9	wouldn't be a very controversial thing, but
10	once we got the TR and got some new
11	information, we realized that possibly it is.
12	What we found out from the new TR,
13	and I think it will probably be up on the
14	board in a minute, is that the US EPA has not
15	registered sulfur dioxide for use as a
16	rodenticide.
17	However, US EPA has registered
18	rodent control smoke bombs with the active
19	ingredients sulfur, charcoal, carbon and
20	sodium nitrate or potassium nitrate,
21	saltpeter.
22	

1	something that's actually not approved for
2	this use. And, you know, we sort of counted
3	on people giving us comments about, you know,
4	whether they were using them or not. And it
5	turns out they are being used and are a pretty
6	important part of rodent control, you know.
7	However and I hope we'll
8	discuss this further because, you know, I find
9	it a little confusing. But since it's not
10	approved for this use, we voted as a Committee
11	not to re-list it for this use unanimously,
12	with one absent.
13	MR. FOSTER: Clarifying questions
14	on this kind of sleeper of a material?
15	(No response.)
16	MR. FOSTER: Okay. Okay. Next up,
17	another material with rodents in mind.
18	Vitamin D3.
19	MS. ELLOR: Since there are few
20	available rodent controls in crop production,
21	we voted to keep Vitamin D3 on the list. Five
22	yes, zero no, two absent.

1	We had a lot of discussion within
2	the Committee about collateral damage. And I
3	think it was Nick that looked up some labeling
4	information. And it is very strictly labeled
5	for use in traps or as bait.
6	MR. MARAVELL: Bait stations, to
7	minimize collateral damage to non-target
8	animals.
9	MS. ELLOR: Right, and that was our
10	major concern in our discussions. So, this
11	one actually, I think, is not all that
12	controversial and we did vote to re-list it.
13	MR. FOSTER: Any clarification
14	there?
15	(No response.)
16	MR. FOSTER: Next, Jay.
17	Streptomycin, right? Is that right, Jay?
18	MR. FELDMAN: I'm not going to go
19	through all the issues again because they were
20	already stated. I'll just tell you what we
21	decided based on the information we had.
22	The Committee took the same vote

1	on this as it did on the streptomycin and
2	again looked at the - I'm sorry - on
3	tetracycline and looked at the history.
4	And on the motion to re-list
5	streptomycin on 205.601 for fire blight
6	control in apples and pears, the vote was five
7	no, and two absent. Thank you.
8	MR. FOSTER: Thank you. Thanks,
9	Jay.
10	Clarifying questions?
11	(No response.)
12	MR. FOSTER: Just worth noting very
13	often we talk about streptomycin and
14	tetracycline in concert very often. So, one
15	has effects on the other. So, I assume we'll
16	get some questions on that eventually.
17	MR. FELDMAN: Yes, I mean, just to
18	clarify that there, they do operate somewhat
19	differently, as we heard yesterday, in that
20	streptomycin is used in a more curative sense.
21	You can use it after the blight is recognized.
22	Tetracycline has to be used
	I

preventively, in a sense, based 1 on some modeling. And applications occur, in a sense, 2 3 prophylactically with the assurance based on the modeling that there's a fire blight on the 4 5 way. Yes, but the resistance issues 6 7 seem to be similar. Although, we did hear testimony yesterday that they don't 8 9 resistance in Washington state to tetracycline. Although, there is some 10 11 literature and certainly in the human area, 12 we're seeing resistance to tetracycline along with streptomycin. 13 So, the resistance issue weighs 14 15 heavy in both cases. MR. FOSTER: Just a reminder there, 16 17 microphones are good. 18 MR. MARAVELL: Based on what 19 heard yesterday, I am not exactly confused, 20 but I think that, while the mode of action is different in tetracycline and streptomycin, 21 22 that actual practices for spraying based on

1	the models and based on the window of when the
2	crop is most susceptible, the actual practices
3	of spraying are probably fairly similar.
4	So, if there's any other members
5	of the Committee that could clarify that, but
6	it seems like it can be sprayed preventively
7	in both cases, you know.
8	It's a fine line. It's a very
9	fine line between what's preventative and
10	what's prudent.
11	MR. FOSTER: Thanks. Thank you for
12	that.
13	Next up, lignin sulfonate.
14	MS. ELLOR: Okay. Lignin
15	sulfonate. If we can get this up so I can see
16	it, lignin sulfonate has two listings on
17	205.601(j) as plant or soil amendments, lignin
18	
	sulfonate chelating agent, dust suppressant
19	sulfonate chelating agent, dust suppressant and flotation agent, and (1) as floating
19	
	and flotation agent, and (1) as floating

And I quess we could fix that, you know, with 1 2 this docket. 3 So, it's listed twice а flotation agent. So, we could just remove 4 that first one and it would be consistent. 5 We went back through old testimony 6 on this from the last Sunset, and also I do 7 believe we did get a new TR on this one. 8 9 And we did have public some comment on lignin sulfonate as well from a 10 11 couple people saying that it was just mostly 12 used for pears. And that there's equivalency difficulties, I think it was with Japan, so 13 that, you know, it was suggested we adjust the 14 15 annotation to say as flotation agent with 16 pears, for pears or whatever. But we haven't 17 discussed that as a Committee, and we might do 18 that later. 19 The Crops Committee, the big issue 20 that came up in the last Sunset discussion and one that came up in our discussions as 21

was the fate of the

Committee this time,

1	lignin sulfonate in the environment.
2	So, addressing that, the Committee
3	recommendation is to re-list lignin sulfonate
4	on 205.601(l) with the amended annotation as
5	floating agents in post-harvest handling
6	subject to wastewater disposal documentation
7	in the Organic Systems Plan to prevent impact
8	to aquatic life.
9	And the second one is re-list
10	lignin sulfonate on 205.601(j)(4) with the
11	amended annotation chelating agent, dust
12	suppressant, just cutting off the duplicate
13	listing for as a flotation agent.
14	The Committee vote was five yes to
15	re-list with the annotation, zero no, and two
16	absent.
17	MR. FOSTER: Clarification
18	questions there?
19	(No response.)
20	MR. FOSTER: Thank you, Tina.
21	Next up is magnesium sulfate.
22	MS. ELLOR: Magnesium sulfate, and

I have to, in the interest of full disclosure, 1 say that I was in the minority on this one. 2 3 So, if anyone in the majority wants to jump in this, but the Crops Committee 4 on recommended letting this drop off the list. 5 It's listing is (j) as plant or 6 7 soil amendments. Magnesium sulfate allowed with a documented soil deficiency. 8 9 The Committee vote was two yes to re-list, and three no. So, It's a very split 10 11 vote. 12 did not have the Technical Review in our hand, you know, as we took this 13 And that came up a lot in public 14 15 comment. The two of us who voted to keep it 16 know, cited that, without that 17 18 information -- and we did send it back for 19 additional information, and I can -- I can --20 we can, you know, look at those questions during discussion -- that it has a long 21

history of use in organic and we'd like to

1	keep it on.
2	And I think that the majority, we
3	were kind of told in our Committee
4	deliberations that there were fully natural
5	alternatives to this synthetic.
6	And that turns out we had a lot
7	of public comment saying that that indeed is
8	not true. So, that's what's going on with
9	that material.
10	MR. FOSTER: Thank you, Tina.
11	Clarifying questions?
12	Katrina.
13	MS. HEINZE: Am I properly
14	interpreting your last statement to mean that
15	the Committee is now recommending re-listing?
16	MS. ELLOR: I think we'd have to
17	leave that up to the individual Committee
18	members based on public comment.
19	So, we didn't go back into
20	Committee and change our recommendation. But
21	based on public comment, you know, it's
22	possible that Committee members might have

1	changed their mind on that.
2	MS. HEINZE: Thank you.
3	MR. FOSTER: Thank you for that.
4	Next up, Colehour. Ethylene
5	oh, I'm sorry.
6	MR. WALKER: You mentioned there
7	were some possible natural alternatives; could
8	you name some of those? Did the Committee
9	come up with possible alternatives to
10	magnesium sulfate?
11	MS. ELLOR: And that's the
12	interesting, I guess, the interesting point
13	is, in fact, there are none commercially
14	available, apparently. And OMRI sent that
15	comment through.
16	MR. FOSTER: Okay. Thank you.
17	Next up, Colehour. Ethylene gas.
18	MR. BONDERA: Okay. I will try to
19	be straight and simple, but we'll see. I
20	haven't done this before. So, bear with me.
21	So, ethylene gas, it's on
22	205.601(k) for regulation of pineapple
	I and the second se

flowering.

So, the Crops Committee, we had a Supplemental Information Report on the induction of pineapple flowering. And there's reference in it about various, you know, pineapples are grown only in Hawaii and California in the United States. It doesn't make up very much of the global production.

We found the report to be sufficient, but still sought additional information from where pineapples are mostly grown.

I think we talked about scaled operation and impacts on others. Discussed --we discussed alternatives from Africa to Taiwan in terms of the research on this, because there are other methods that are used internationally for induction of flowering in pineapples.

And I think, you know, one of the big things that we talked about really is operation size and location, you know.

Unnatural pineapple flower induction facilitated through synthetic -- this is a synthetic -- synthetically sourced petroleum ethylene gas, we discussed in the Committee how it's inconsistent in a lot of different ways with overall organic standards.

And the motion that we considered was to continue the listing in a positive way of ethylene gas as a plant growth regulator for the induction of pineapple flowering.

So, you know, since then we've had public comment. And I am certain that we will have some public comment tomorrow primarily from Costa Rica. But it essentially comes down to the export from a country where there is an export market that was created about this allowance of ethylene gas being used for the induction of flowering.

I think that, you know, that one case example, in my opinion, is not adequate information in terms of what is -- it's not the whole picture.

I think that, you know, I'll throw 1 out to you the fact I am from Hawaii. And, 2 3 you know, in terms of a conflict of interest, the truth is I have organic pineapples on my 4 farm. 5 And not only do I not consider the 6 7 induction of flowering, I think that the truth is the consumer demand is such that there's 8 9 absolutely no reason for it. I think, you know, talking to --10 11 and at this point in time and if you look 12 historically, it's not true, but at this point in time there is not very much large-scale 13 pineapple production. 14 There used to be Dole. 15 There used to be a large scale in the state of Hawaii, 16 17 but that's no longer the case. 18 I mean, there's essentially one 19 large-scale, and large in quotations, 20 pineapple producer in Hawaii. And, you know, the goal is to be able to harvest and ship the 21

product for export in volume.

And I think that, you know, I will 1 in a few seconds, wrap this up by trying to 2 3 address that. I think, you know, I think that 4 John will tap me on the shoulder when this 5 gets too weary, because I think the truth is 6 that, you know, are we basing -- can organic 7 standards really be exclusively based on the 8 9 needs of large-scale operations, or do we have to look at the overall -- do we have to look 10 11 at the bigger picture like John introduced 12 this? pineapples, 13 Do we want example, year-round? Pineapples don't grow 14 15 year-round. Do we want pineapples to compete 16 in marketplace 17 the with the chemical 18 approaches, or do we look at the whole 19 picture? 20 Do we look at the environmental and the health and the whole cost with that? 21 22 And I think that that's a big question.

The Crops Committee recommended against the continued listing of ethylene gas.

And I want -- excuse me -- I just want to make a few comments.

You know, you may or may not be that familiar with ethylene gas. But, you know, from a physical perspective, you can look really quickly and there's a long list of many things you are familiar with and many things you may not be that familiar with.

But from apples to honeydew melons, to kiwi, to pears, to plums, you know, to all kinds of other things, passion fruit and papayas, you have a natural release of ethylene gas. It's not that it doesn't exist naturally. It does exist naturally.

However, I just for a second want to say that, you know, based on public comments and on the basic understanding or organic foundation blocks, I really don't think that a decision on, like I said, international and export rationale, we really

need to look, in my opinion, towards a gold standard.

And I think that the question is are we as the NOSB, and I think that this goes back to my personal truth and, you know, is our goal to simply ensure the status quo, or are we looking to make sure that we have a clean and pure crop as much as -- sorry. Excuse me.

Do we want to maintain that present system is one conclusion, whereas the whole goal to maintain and ensure organic integrity, I think, is the other question.

And I think that we have to look at that whole question about compatibility with the system of sustainable agriculture.

And I think that just -- and I am going to wrap up. You know, for me, I think that this is all -- I'm considering this all off-topic in some ways because, you know, am I talking about process here, or am I talking about the subject of ethylene gas?

2.

And I think that we really need to 1 2 decide -- sorry. I'm just going to read this 3 briefly. If we're making a recommendation 4 to the NOP and if we're going to make an 5 informed presentation, you know, like I said, 6 7 are we going to default to the status quo, or are we going to try to resolve the guestion by 8 9 saying that there's unanswered questions about this. 10 11 In our -- the information we have 12 that we were considering the decision upon honestly and seriously was not sufficient 13 information. 14 15 If you look, you can go -- and if you go to African countries, you go to other 16 world, you know, there's 17 of the companies like TIFBio who is doing organic 18 19 farming, compatible flower induction treatment 20 of pineapples without ethylene gas. 21 And this is not uncommon if you 22 look -- I'm sorry. I think that, you know, we

1	have to review and look at who is going to
2	testify about this coming up in this context.
3	Who are we going to get input
4	from? I'm not going to get input from people
5	in Taiwan or people in Africa. They're not
6	going to send this doesn't affect them
7	because they're talking about we're talking
8	about US expert, essentially, getting
9	pineapples to the United States instead of
10	backing off and looking at the whole picture,
11	and I thank you for bearing with me.
12	MR. FOSTER: Thank you. Any
13	clarifying questions on there?
14	(No response.)
15	MR. FOSTER: All right. Moving on.
16	Last of the 601 Sunset items. Sodium
17	silicate.
18	MS. ELLOR: I don't have that as
19	one of mine, but I'd be more than happy to
20	talk about it.
21	MR. FOSTER: Would you, please?
22	MS. ELLOR: Sure. Yes, I don't
	l

1	remember who did that. Was that you, Jay?
2	MR. FELDMAN: I did.
3	MS. ELLOR: Okay. Do you want to
4	take it?
5	MR. FELDMAN: Thank you. Too
6	focused on CSO right now.
7	So, this is 601(1) as a floating
8	agent or floating agents in post-harvest
9	handling. Sodium silicate for tree fruit and
10	fiber processing.
11	We requested, but at the time we
12	did this we didn't have the TR. And, again,
13	as you pointed out, Tina, we received a fair
14	amount of criticism on that fact that for some
15	of these we didn't have TRs.
16	But in many cases, we did get a TR
17	shortly after we made the Committee decision.
18	But in this case, we didn't.
19	But, again, we looked at this and
20	we were hoping to get public comment on this,
21	as we have, as a way of informing the
22	Committee.

1	But we took the position that
2	lacking the information in this case, at least
3	the majority did that, and knowing what we
4	knew about its use pattern, that we were
5	five nos, two absents.
6	So, we're recommending against the
7	continued listing of sodium silicate allowed
8	for tree fruit and fiber processing as a
9	floating agent and post-harvest handling.
10	And, again, the motion was in the
11	positive. So, again, the vote was five no,
12	two absent.
13	So, my sense is we'll consider the
14	public comment on this, which we didn't have
15	the benefit of when we looked at this. And I
16	imagine this will be on our agenda when we
17	regroup between now and Friday. And we're
18	looking forward to more public comment on
19	this.
20	MR. FOSTER: Thank you, Jay.
21	Any clarifying questions?
22	(No response.)

MR. FOSTER: Thank you. Moving on 1 to, next sodium nitrate. This is a bit of an 2. 3 oddity in that it's а 602 listing, a prohibited natural, that is up for Sunset. 4 The current listing is 205.602(g) 5 sodium nitrate, unless use is restricted to no 6 7 more than twenty percent of the crop's total nitrogen requirement. 8 9 This twenty percent was a derivative of pre-NOP -- many pre-NOP private 10 11 standards. 12 Interesting here, it's a little interesting in that it was typically called a 13 restricted material. So, restricted allowance 14 15 as opposed to how it's structured here, which is prohibited with an exception, and that that 16 exception is a little unwieldy. 17 18 just want to make sure So, 19 everyone is clear on where it falls on the 20 list, and that makes the Sunset clause a little more -- a little different in that if 21

the material were to come off of 602, then it

would -- then the material would be allowed 1 without restriction. 2. 3 That's a little different than any materials that we have other of the 4 So, I just want to make 5 encountered so far. sure we're all clear on that. 6 I'm scrolling and --7 Hold on. this recommendation was designed also 8 9 address the NOP's request that we review it in the context of essentially export 10 11 requirements. 12 The Committee spent a fair amount of time discussing that and wanted to 13 recognize the need to respond to the NOP. 14 hopefully did that in the context of this 15 16 recommendation. 17 The that, since consensus was 18 export requirements are not a decision-making 19 criteria in OFPA, or the regulation, that we 20 wanted to be respectful of their request, but chose instead to look at what the -- kind of 21

the foundation principles were that led other

1	countries to make their consideration that
2	sodium nitrate was not appropriate or allowed
3	in organic production.
4	That being said, the Committee
5	recommendation was to re-list sodium nitrate
6	on 205.602(g) without an annotation. And this
7	would be a complete prohibition. The twenty
8	percent allowance would no longer be in place.
9	So, the vote there was seven yes,
10	zero no, and zero absent.
11	Any clarifying questions?
12	(No response.)
13	MR. FOSTER: Okay. Last on our
14	list is again something of a unique situation
15	where the Program asked us to deliberate on
16	the determination of the synthetic or non-
17	synthetic status of corn steep liquor.
18	Those of you who have been part of
19	the discussion for some time now are likely
20	aware it's been fairly contentious.
21	There's been a great deal of
22	public comment on this. All of which we have

listened to and absorbed. I assume this will 1 take some of our discussion time close after. 2 3 I would prefer to spend most of our time in discussion on this. So, I'm going 4 to keep the majority opinion on this very 5 brief. 6 7 I think also, Jay, if you could keep a minority discussion fairly brief just 8 9 to allow more time for discussion; is that okay? 10 11 MR. FELDMAN: Yes. 12 MR. FOSTER: Thank Real you. quick: in an Action Memorandum dated April 13 23rd, the NOP requested the NOSB review corn 14 15 steep liquor concerning its classification as 16 synthetic or non-synthetic as an input for crop production. This was for the fall 2010 17 18 NOSB meeting. 19 The Crops Committee was asked --20 asked a number of questions of the Office of Science and Technology, who at the time was, 21 22 my understanding at the time, the contracted

party for the NOP to answer some of these questions.

We had questions around changes in molecular structure and the significance of those changes, questions about the physical reorientation of atoms, whether or not that constituted a chemical change, what other materials were made from this process that are currently on the National List and how would those be affected if we determine that this process causes chemical change sufficient to be designated as organic, also asking the question, can corn steep liquor be without the use of prohibited substances, and are there other materials that are more benique that can be used to make CSL or corn steep liquor, and then are there other permitted materials that could be used instead of CSL for its current use?

The Technical Review was received in February of 2010, and did not answer these questions directly. However, we knew we

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1	needed to proceed with discussions.
2	This determination was discussed
3	over the course of a number of weekly Crops
4	Committee meetings. It took a substantial
5	amount of time, all well worth it.
6	The eight-page recommendation also
7	includes a number of a formal minority
8	opinion which I'll let Jay summarize, a
9	synopsis.
10	But in the end, the recommendation
11	at this time, this was in January, Crops
12	Committee recommended that corn steep liquor
13	produced via the countercurrent corn wet
14	milling process be considered as non-synthetic
15	and allowed for use in organic crop
16	production. The vote was four yes, three no,
17	and zero absent.
18	Jay, do you want to summarize the
19	minority?
20	MR. FELDMAN: Can I have five
21	minutes to go through this just for the
22	MR. FOSTER: I would prefer

1	shorter, but also we'll have time for
2	discussion beyond that.
3	MR. FELDMAN: For the new members,
4	I'd just like to lay this out.
5	I mean, what happened was we at
6	our last Board meeting, we had a discussion on
7	this and the Committee decided to pull back
8	the decision because we were given new
9	information.
10	What was presented as new
11	information during the Board meeting, we felt
12	we needed to evaluate that new information.
13	The TR concluded that there was
14	chemical change occurring. The TR we received
15	as a Committee, concluded that there's
16	chemical change occurring.
17	CHAIR MIEDEMA: Jay, we can't hear
18	you very well. Can you move your mic closer?
19	MR. FELDMAN: Yes. And since
20	there's chemical change occurring, we voted
21	the majority of the Committee initially voted
22	that this was a synthetic process resulting in

synthetic material.

When we received testimony similar to this meeting that was so contrary to that, we pulled the recommendation, the motion to try to get some independent verification of the position that this was in fact not a synthetic process, not a chemical-change process. That was our task as a committee.

So, we found a researcher who works -- basically has worked on the corn wet milling process for about almost two decades.

And works, coincidentally, for the Agricultural Research Service in Wyndmoor, Pennsylvania.

And he's written thirty different articles on corn wet milling. He's researched it. He knows most of the plants in the country and he knows the process. So, we felt he was a perfect candidate.

I'm just going to run really quickly through this. So, this is a question of organic integrity for us on the minority

side. We want to see an objective review and transparency.

The process, and this was the conclusion which is in the minority, the process of making corn steep liquor is different from natural practices that are defined in our standards expressly because the process requires adding a synthetic chemical to an otherwise natural steeping lactic acid fermentation process to effect chemical change necessary to the end product being created.

Now, that's not enough, of course. We're not judging the usefulness of whether this could be a useful material for farmers. That's not the question before us. It's a foundational issue of how we define chemical change.

But we can't just say that a synthetic's been added and, therefore, it's chemical change. That's not what this committee or the minority is saying.

We have to evaluate this in

accordance with the Board policy, which is 1 principles, 2 three quiding that the 3 classification of materials determined by both the source of the inputs and the process used 4 to make the material, the same chemical can be 5 agricultural, non-synthetic 6 orsynthetic, 7 depending on the source. If a material is processed such 8 9 that it is classified as synthetic, then the material is classified as synthetic regardless 10 11 of source. 12 In the case of corn steep liquor, have a material whose source is non-13 However, the source is only the 14 synthetic. first issue of concern. 15 16 The standard requires an assessment of the wet milling process to which 17 18 the corn is subjected to determine whether it 19 should be classified as synthetic. 20 We have a lot of materials, as you 21 know, in organic that start from an 22 agricultural material or food waste.

question is, then what happens to it.

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have to look at the So, we classification and ask ourselves a series of The source of the material is not questions. from mineral plant or animal matter, and not a substance by naturally occurring biological processes -- this is how our Board policy reads, or the process used to manufacture material is synthetic, material or the a significant level of contains synthetic substance not on the National List of allowed synthetics. This is our policy.

It's our belief that chemical change occurs -- that occurs when an agricultural material is processed by itself or in combination with other agricultural materials, the resulting materials should continue to be classified as agricultural.

Clearly, chemical change happens in these cases if looked at from a purely chemistry perspective. But from a consumer perspective, these materials are agricultural.

So, this was the Materials Working 1 Group. A little bit of history for the new 2 3 people. Synthetic, again the definition in 4 our policy is substance as formulated or 5 manufactured by a chemical process, or by a 6 7 process that chemically changes a substance extracted from a naturally occurring plant, 8 9 animal, mineral sources, except that such term shall not apply to substances created by 10 11 naturally occurring biological processes. 12 So, what you'll hear in testimony is that in fact what's happening to corn steep 13 liquor is a natural process. And this is what 14 we had to ask David Johnson. 15 So, I'm going to skip over all of 16 17 this because you'll read in the minority opinion that we met all the thresholds for 18 19 what our policy says in terms of synthetic 20 chemical change, but who have we heard from? This is where the crux of the 21 22 matter is. We get a lot of information on

this Board. Some of it comes from industry, some of it comes from academia, some of it comes from government, some of it comes from public interest, and we have to sort all this out.

What's happened in this particular case is we have two sets of information. We have government information coming from the TR and a government researcher, and we have industry information coming from the manufacturer, the formulator and from the organic -- or the trade groups and the trades. And, basically, those two positions are at odds with each other.

So, we're in a situation where we have to judge this thing on its merits and we have to go through, I think, almost a decision tree. And I hope we have time to do this in discussion or in side conversation.

But when Dr. Johnson met with us, we threw these questions up at him. Is corn steep liquor a different substance? These are

criteria that the Board has all the 1 2 traditionally used in terms of defining 3 chemical change. he's saying again, 4 as, third-party independent source of scientific 5 information, he's saying he's agreeing with 6 7 the Technical Report because the sulfur dioxide, the sulfur dioxide, again a synthetic 8 9 material, is needed to break the disulfide bonds. And that's the mechanism that's 10 11 working here. 12 There are new chemicals formed. Again, another criteria established by the 13 There are new chemicals formed due to 14 the addition of the sulfur dioxide. 15 These are formed during the breaking of the disulfide 16 17 bonds. 18 And if we go through some of the 19 other questions, is the breaking of the bonds 20 in the corn matrix a necessary part of the countercurrent wet milling process? 21

Again, here's a guy who's worked

in this field as a food technologist. It is also clear from these studies, that without the addition of SO2, that the protein matrix is not degraded sufficiently to produce good starch yields.

So, I'm going to stop there, but I realize this, you know, we've been at this a long time and I realize people are going to bring different perspectives to this. But if we don't get this right, I think we have a problem going down the road.

We've heard a term that came up in our pre-meeting that we had before the NOSB meeting where somebody said you can't be married to the outcome going into these conversations. Because if you're married to the outcome, then you're going to try to find justification for what you want the outcome to be.

And I think if you read David

Johnson's responses, and I urge you to do that

before you vote on Friday, it's included in

the Crops Committee comment portion of our packet, you'll see that he's answered every question that the Board has required us to ask in the context of chemical change.

Are we breaking bonds? Are we creating new chemicals? Are there resulting residues? Would this happen naturally? Would it happen on its own? Is it purely a fermentation process? How it is not like adding wine to sulfites. This is not a processing aid. This is a manufacturing process.

And so, if you look at those questions clearly and you're not married to the outcome, I think the minority believes we really don't have a choice. And that's not, again, a judgment as to whether this could be a valuable product, whether it has qualities that can aid in the organic system approach.

I just urge you to take a -before you vote, sit down ten minutes, read
through Dr. Johnson's response carefully and

take it for what it is. 1 I mean, the guy doesn't have a 2 3 horse in the race. He's a government researcher and I think he offers us 4 insights that will help us down the road as we 5 look at these questions, unfortunately, 6 7 somewhat technical questions that we have to look at when we define chemical change. 8 9 you. CHAIR MIEDEMA: Katrina. 10 11 MS. **HEINZE:** Ι have a process 12 question for John. I'm apparently an old dog who's hard to retrain on the discussion. 13 14 sorry. 15 How do you want to organize the discussion? I was going to suggest perhaps we 16 do petition materials, get those done, then 17 18 Sunset and then CSL or some sort of order so 19 we're not jumping between everything. 20 But maybe you could just say how you'd like this to go so that we can respond 21

accordingly.

MR. FOSTER: In general, I would 1 2 prefer to start with Sunset. We've 3 prioritized things. We've deprioritized things that were not Sunset, in many cases. 4 to make sure that we cover those 5 I want I think that's our first, you know. 6 7 Now, having said that, obviously of the issues before us, the most 8 some 9 contentious ones are either petition something else still, but I think our first 10 11 job ought to be Sunset. 12 CHAIR MIEDEMA: John, we asked Mr. David Johnson to hang around for us this 13 morning 14 as expert in-house an 15 oxytetracycline. And I would just ask that respecting his time since we told him we were 16 going to take that one up first thing in the 17 morning, that we get that one to the top of 18 19 the queue. 20 MR. FOSTER: With that in mind, I am happy to oblige that. Tetracycline first, 21 22 then Sunset? Suitable? Sorry, yes. Then CSL

or sodium nitrate. 1 2 I mean, we've got a lot to cover. 3 But, yes, tetracycline first, Tracy, to your point. 4 5 CHAIR MIEDEMA: Okay. We're not going to have enough time to get through our 6 7 discussion before we're going to want to take a break, but let's do try to get a couple of 8 9 these bears wrestled before we take a break. MR. FOSTER: All right. Questions 10 11 about tetracycline. 12 CHAIR MIEDEMA: I have one. Where did the Committee come up 13 with this information about 14 the blight-15 resistant items tasting just as good or being 16 just as good? 17 this is going to be a And completely single data point of my household, 18 19 but the amount of organic apples consumed in 20 our house is pretty extraordinary, and I can't get my kids to eat Red Delicious, Golden 21

Delicious and Granny Smith anymore.

1	And my apologies to any growers in
2	the room that those are their pride and joy,
3	but they don't taste very good.
4	And the idea of tossing out all
5	the great-tasting apples is something I'm not
6	very comfortable with as a consumer.
7	MS. HEINZE: Okay. So, that's
8	really funny because my written note here says
9	exactly the same thing.
10	So, we eat I buy 20 apples
11	every week for our family. And every couple
12	weeks I buy Red Delicious because they're a
13	buck cheaper at my local co-op. And at 20
14	apples, you know, that's kind of like it
15	actually moves the dial on the grocery
16	receipt, and they won't eat them.
17	So, if that's all I buy that week,
18	I am eating 20 Red Delicious apples that week.
19	So, that's funny that you said that. So, we
20	have two data points.
21	So, that being said, I was, Jay,
22	all levity aside, you had one slide in your

presentation that I just wanted to make a 1 So, you had the picture of the 2 comment on. 3 two apples with their little labels, hi, I wasn't sprayed, and, hi, I was sprayed. 4 The apples aren't sprayed, right? 5 The flower -- we heard testimony that there's 6 7 virtually no residue of the antibiotics in the apples. So, I just want to remind everyone 8 9 that we did hear that testimony. it's little bit 10 And so, а 11 misleading to have had that label. 12 MR. FELDMAN: The data we received in the TR, again, you know, we're going to 13 hear testimony, but we have to rely on the 14 science that we receive and then balance that, 15 you know, the Committee receives a TR and we 16 base our decision on that. 17 Now, if we open up the Committee 18 19 process and disclose the minutes, we might 20 have gotten these comments earlier. But the we had was from the TR that the 21 comment

sprayed in apple production,

material

is

1	two walls got age through the walcut weterial and
1	translocates through the plant material, and
2	residues are found in the fruit principally in
3	the core and the peel.
4	That's the data we received in our
5	Technical Review.
6	CHAIR MIEDEMA: Katrina.
7	MS. HEINZE: I understand that
8	that's what the Committee got in their
9	Technical Review. Part of the reason we have
10	public comment is so that people can bring
11	other data.
12	So, I was just highlighting for
13	people as you make your decision, that we've
14	had public comment that has other data.
15	CHAIR MIEDEMA: Barry.
16	MR. FLAMM: As an apple previous
17	apple grower and apple eater, I'd like to
18	comment on this quality.
19	I grew eight different varieties
20	of apples, none of which were Gala or Fuji
21	because I wouldn't plant them, because I knew
22	they had disease problems. And I didn't have

any Red Delicious, because I think that's a misnomer.

I had eight different varieties -(Laughter.)

MR. FLAMM: -- eight different varieties of delicious -- of good-tasting apples, I should use the word. The most common was McIntosh which was the premier apple in Bitterroot and in Montana. And it's been kind of driven off the market and off the market shelves because of the apples being grown elsewhere mostly in Washington and just flooded our market.

But this was a premier apple, and it's a great-tasting apple, so I have to raise objections that there isn't any other good -there's heritage apples out there that are better than anything that -- and these all of a sudden, you know, we're talking about varieties that are really new on the market that you couldn't even find a couple years ago. At least not on any store shelves in

1	Montana. And now, they have occupied the
2	apple space.
3	So, I have to dig deep in my root
4	cellar to get the apples that taste good.
5	Excuse me for that.
6	CHAIR MIEDEMA: I'd like to hear
7	from our experts a brief summary of the
8	research on alternatives. Just again for the
9	benefit of this Board, when we might expect to
10	see some alternatives, promising research, you
11	know.
12	I don't feel like we have to hold,
13	you know, anybody pin anybody's ears back
14	that this is absolutely going to happen, but
15	just a forecast of what's out there.
16	David Johnson, would you mind
17	approaching the podium?
18	Ken Johnson. Thank you. I'm
19	sorry. Come on up.
20	DR. JOHNSON: So, what I crammed in
21	three minutes yesterday was a pretty good
22	summary, but it happened in three minutes.
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So, I think that the alternative 1 that people are most interested in is this 2 3 yeast product. And it is -- currently it is registered in Europe for fire blight control. 4 My understanding is it isn't used 5 that much there because they also have a lot 6 7 of issues with apple scab in Europe. So, they were putting fungicides on the tree, which of 8 9 course hurts the yeast. In the desert climates that 10 11 have in eastern Washington, we don't really 12 have apple scab. So, it looks like this yeast product can have a life out there. 13 company that's bringing 14 into the United States is Westbridge, which 15 has a big history in organic materials. 16 And they have it in EPA review 17 18 and that review is supposed to now, 19 completed by August or so of this year, is my 20 understanding. So, we are expecting this material to be useful this coming -- 2012. 21 22 There's one issue with the yeast

material, and it's still, I think, needs some research, is that the Germans that developed it are -- you put on like a pound and a half of yeast per acre, which is quite a bit of yeast. But they're also recommending that you put on about nine to ten pounds of this acidic buffer.

And my understanding is the buffer is mostly citrate and skim milk mixed together, but it's nine to ten pounds per So, it's a lot of material. So, you're going to be putting on about 12 pounds of material of this and there really hasn't been any pricing yet on that or what it's going to In a desert environment, do we need that much of this buffer when it goes on? so, those are some big questions about it.

CHAIR MIEDEMA: Do any other Board members have questions of Ken Johnson while he's still here? Nick.

MR. MARAVELL: Yes, I do. I may have a lot of questions. So, could you give

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1	me some guidance on how we should proceed
2	here?
3	I find this fascinating.
4	CHAIR MIEDEMA: Fire away.
5	(Laughter.)
5	(Haughter.)
6	MR. MARAVELL: Okay. It's a
7	pleasure to have you here, Dr. Johnson.
8	Is this type of research into
9	alternatives going on in other parts of the
10	country? In other words, are there other
11	research stations working on this in other
12	climates?
13	DR. JOHNSON: Well, there's about
14	three groups that work on fire blight in the
15	country; our group at Oregon State; Jim
16	Adaskaveg down in Riverside; George Sundin at
17	Michigan State; and Herb Aldwinckle at
18	Cornell.
19	I guess in terms of alternatives,
20	the eastern half of the United States, because
21	their temperatures and their humidities come
22	up so much faster and it gets warmer so they

can get into these severe risk periods with 1 fire blight quicker in the east, they've kind 2 3 of soured on these alternative materials quite a bit. 4 But when you look at where organic 5 production is, 6 you see it's really 7 concentrated, you know, in the western states here. 8 9 So, they don't think about organic production that much. So, there's sort of 10 11 that two sides of it. 12 So, in the west here we've had this -- we've had a remarkable growth in the 13 number of organic acres in production. 14 15 so, there is interest in these softer 16 products. I mentioned yesterday we do have 17 growers that are producing under international 18 19 standards or EU standards, and they are not 20 using antibiotics. Some of those, again, you would 21 22 find more apples in that probably than pears,

1	because pears are riskier. You're going to
2	find those kind of places like in drier
3	climates like in the Okanagan Valley as
4	opposed to, say, the Columbia Basin because
5	it's easier to it's a lower risk for fire
6	blight area. It's a little bit cooler and
7	it's a little bit drier.
8	So, IOP has kind of found its
9	niche out there as opposed to where other
10	growers in higher-risk areas are under the NOP
11	standard.
12	MR. MARAVELL: So, in terms of the
13	interest in the viability of attracting
14	research funds for doing alternative work, the
15	west would be a more fertile ground.
16	What can we offer the people in
17	the midwest and on the east coast as potential
18	alternatives?
19	I realize this is not your area of
20	expertise
21	DR. JOHNSON: Yes, well
22	MR. MARAVELL: but we have to

consider all of our -1 DR. JOHNSON: Right. And I don't 2 3 think anybody has looked hard at the yeast I mean, we sort of picked it up a 4 couple of years ago as it came in. 5 heard Westbridge was interested in this. 6 7 And I was actually in Poland last summer at an international meeting, and I met 8 9 the Germans that developed this product and so it's really pretty new to us and it was kind 10 11 of a new way of thinking about fire blight. 12 We had looked at yeast before, but we hadn't really done any extensive work with 13 them. 14 15 And myself and Tim Smith 16 Washington State in Wenatchee, we were -- we test a lot of products for fire blight control 17 over the years. And we've kind of got this 18 19 thing like, oh, yes, we'll try it. 20 not going to work, you know. 21 And but we got this yeast material

and we put it on some trees, and we were

pretty impressed with what we saw. 1 And so, we were just kind of -- it 2 3 opened our eyes a little bit. And so, we're still really on the learning curve as 4 5 really how to use the material. The first time the company asked 6 7 us to try it, they said, well, put it on at five percent bloom, 20 percent bloom, you 8 9 So, it was like four treatments. And I said, well, that's a lot of 10 11 treatments. And I -- and my own thinking 12 about it was as I was presenting yesterday, was it would probably do well in that floral 13 cup because yeast -- I mean, the literature 14 15 says that's where yeast like to grow. And sure enough, we've been using 16 17 it now as a late-bloom product and that's where we're seeing the good benefits from that 18 19 material. 20 MARAVELL: So, you would be MR. developing -- you feel the efficacy is there, 21 22 but you'd be developing information that would

be useful to evaluate cost, protocol --1 2 DR. JOHNSON: Cost, and then I 3 mentioned yesterday the scale-up because, you know, I've got four, you know, 4 about half acre to an acre orchards down in 5 Corvallis. And we're out there with high-6 7 quality materials and the time to, you know, the sprays on the trees. And we're 8 9 essentially, you know, as close to as good as you can get when we do our work in terms of 10 11 research. 12 And when you scale up now, you start talking about 50, hundred acres and many 13 times blocks are more than one cultivar there. 14 That's not one cultivar. 15 And what that means is that one 16 17 cultivar can be at this stage of bloom, and then one, you know, it might be three rows of 18 19 that, and then three rows over here is another 20 cultivar. And so, the whole thing becomes a 21 little more messy.

what does this mean

And so.

1	terms of scale-up and how practical this is
2	going to be to somebody that's operating
3	something at that size?
4	MR. MARAVELL: Let's go to the
5	other alternatives that were discussed, which
6	was resistant rootstocks.
7	DR. JOHNSON: Right.
8	MR. MARAVELL: Is that applicable
9	to the three different climates, if you will,
10	the east and the west and
11	DR. JOHNSON: Oh, yes. Absolutely.
12	I mean, we've heard the various testimony on
13	the rootstocks yesterday.
14	Most of the modern apple orchards
15	now are going to very high-density trees. So,
16	you want the rootstock that dwarfs the tree
17	the most.
18	And then the one that's used most
19	commonly now is called M9 or some variation of
20	M9, and M9 is very susceptible to fire blight.
21	The problem is, is with the Geneva
22	alternative to M9 is that it's just very,

1	very, very difficult to propagate. And that's
2	the problem is why the Geneva rootstock that
3	would replace M9 is not getting out there very
4	quickly, is that the nurseries are just
5	struggling with how to propagate it.
6	MR. MARAVELL: But does it have the
7	dwarf characteristic?
8	DR. JOHNSON: Absolutely, yes.
9	There's this whole series of Genevas. And so,
10	they would go through the various sizes that
11	you can control an apple tree at.
12	But the one that makes this small
13	apple tree that's appropriate to the high-
14	density plantings turns out, of course, as the
15	most difficult to propagate.
16	MR. MARAVELL: And so, you could
17	use that with Gala and Fuji?
18	DR. JOHNSON: That's my
19	understanding, yes. Yes.
20	MR. MARAVELL: In terms of your
21	view -
22	DR. JOHNSON: Let me just make a -

1	but a resistant rootstock doesn't make Gala or
2	Fuji more resistant to fire blight. Okay.
3	So, okay. So, the problem with
4	the rootstock is, is that if you get a little
5	bit of blight up on Gala or Fuji, then as
6	Debbie said, the bacteria moves through the
7	tree systemically and it floats down.
8	And it - you don't really see
9	disease. And so, you get a strike up here.
10	And then the cells just float down the tree.
11	And then when they hit the graft
12	union because you've changed genetics there
13	at the graft union, so now you're into M9
14	M9 is hypersusceptible, and the blight
15	reignites right there.
16	Well, it's like getting blight
17	around your neck, you know. Your head's going
18	to fall off, right?
19	(Laughter.)
20	MR. MARAVELL: But what you're
21	saying is, in effect, even if you have the
22	Geneva rootstock, your rootstock would be

resistant. 1 2 DR. JOHNSON: Yes. 3 MR. MARAVELL: But the Gala and the Fuji apples would - the upper part of the tree 4 would still be high -5 DR. JOHNSON: Would still be the 6 7 And as the question was yesterday, in their younger years, you know, their first six 8 9 to seven years, they're very susceptible to blight. 10 11 And then they start to settle down 12 a little bit after that point in time, and blight in apples doesn't become quite so much 13 of a problem. 14 MR. MARAVELL: Could you envision a 15 16 strategy on the part of the National Organic 17 program where there are multiple approaches, but one might include restrictions or - I 18 19 don't know how to put this exactly - the most 20 appropriate time to use antibiotics in terms development for 21 of stage of we use

livestock, for example.

1	Is stage of development a viable
2	concept for fruit production?
3	DR. JOHNSON: I think that's true
4	in apples. In pears, it's not really true.
5	Pears settle down a little bit, but pears are
6	almost always susceptible to blight.
7	And what happens in a big pear
8	tree is that the tree just has a little bit
9	more strength to recover from blight after
10	you've done a lot of cutting on it.
11	I've got like for example, in
12	Corvallis right now, I have an 11-year-old
13	Bartlett block. And this is the first year
14	I've used it for a fire blight experiment.
15	It's 11 years old.
16	If I went in there before that, it
17	just scares me to death, you know, and I would
18	lose it. So, I'd lose my investment.
19	I do most of my work in pears in a
20	55-year-old Bartlett block, and we smash on
21	those things. And they're very susceptible,
22	but the trees are big enough that they'll push

1	out new growth, and most of the trees will
2	recover over a period of a year or two.
3	So, pears are always susceptible.
4	Apples tend to settle down a little bit.
5	Though, there are some apples that are out
6	there now like Pink Ladies. I'm not sure they
7	ever really settle down.
8	But I have a Gala block, and in
9	the first years I used that I would lose trees
10	pretty routinely.
11	But now that they're also about
12	ten years old now, I go in and do blight
13	experiments in there, and I don't really lose
14	trees. The trees - the resistance in the tree
15	is higher as they get older.
16	CHAIR MIEDEMA: I have a process
17	question for the Crops Committee.
18	This material is not being
19	considered for Sunset, is my understanding,
20	because it was up for expiration instead of
21	Sunsetting? Is that correct so far?
22	MR. FOSTER: Yes.

1	CHAIR MIEDEMA: Okay. So, just a
2	for instance. If we were to accept the
3	reasoning of this petition or remove the
4	expiration and put the material back into the
5	Sunset process, it would still be renewed, you
6	know, it would still be up for re-listing
7	every five years. And new information would
8	still be imposed upon its existence on the
9	National List, correct?
10	Am I still correct so far?
11	MR. FOSTER: Yes, that's correct.
12	CHAIR MIEDEMA: Okay. So, given
13	those two things, is it an option for us at
14	this meeting, to accept the petitioner and get
14 15	
	this meeting, to accept the petitioner and get
15	this meeting, to accept the petitioner and get this material back into the Sunset list
15 16	this meeting, to accept the petitioner and get this material back into the Sunset list process, and can we make this docket? As
15 16 17	this meeting, to accept the petitioner and get this material back into the Sunset list process, and can we make this docket? As we've been warned, we have some pretty serious
15 16 17 18	this meeting, to accept the petitioner and get this material back into the Sunset list process, and can we make this docket? As we've been warned, we have some pretty serious problems on timing.
15 16 17 18 19	this meeting, to accept the petitioner and get this material back into the Sunset list process, and can we make this docket? As we've been warned, we have some pretty serious problems on timing. MR. FOSTER: I believe that's in

1	conferring. We'll have to get back to you.
2	CHAIR MIEDEMA: Okay. Please do.
3	That would be a critical answer in our
4	considerations.
5	MR. FOSTER: So, I think I'm just
6	going to wait to see if I'm going to get
7	corrected. So, that's fine. That's fine.
8	Yes, please. Go ahead, Nick.
9	MR. MARAVELL: We're talking about
10	timeline issues right now. And so, I'd like
11	to get an idea - you've been working on this
12	for 20 years. You've seen development of
13	research strategies over these 20 years.
14	We're looking at our maximum
15	time horizon is five years before things are
16	re-Sunsetted or if that's even a word.
17	All right. But what would five
18	years - what sort of a feeling does five years
19	give you in terms of the research progress?
20	In other words, you view this over
21	multiple seasons. What does five years look
22	like in terms of your assessment of the

biological

various alternative strategies to get away
from antibiotics?

DR. JOHNSON: Yes. So, like I say,
I started on this 20 years ago. And I would
say that 20 years ago there was more

7 control. And then there was a pretty intense

general

about

in

8 effort - this is not just talking about fire

9 blight, but any kind of plant disease in

10 general during the '90s.

enthusiasm

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And I think what sort of came out of it at the end of it was that, well, we've done a lot of work on biological control. And certainly biological controls do some good, but there seems to be asymptotic limits to how far biological control can take you.

So, that being said, I think that there's a little less enthusiasm these days about biological control in general. But I think in fire blight, we have a unique situation where we're seeing efficacy in with products and strategies.

And when we started on this, there really wasn't anything registered. And so the registration process actually takes, you know, you identify something, you do some science, start results, you convince you to see somebody that, well, maybe this could be a product and then - so, over those 20 years, now we've got the BlightBan A506, we've got Serenade, we've got the Bloomtime Biological which is actually made in central Washington locally, we've got this yeast that's come along now. So, the list of materials has gone up over time. And so what our strategy right now in research is, is how do we put these things together to do the best that we can? And so, I would say that in that regard with this yeast material and what I showed you yesterday, you know, we're starting - we're making progress on that, and that's really not that far away, you know.

If that's the rules that people

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1	have to live by to grow organic fruit, then I
2	think that they can be up and running in that
3	in a fairly short period of time. We're not
4	talking about 20 years. We're talking about
5	several years.
6	So, I do still - I think that the
7	scale-up issues, the pricing issues, the cost
8	issues are still out there. And those really
9	aren't so much about science - the scale-up to
10	some degree, is about science, but some of
11	these other things, they kind of get out of
12	the realm of science.
13	MR. FOSTER: I have Jay up with -
14	MR. FELDMAN: Thanks for sticking
15	around and thanks for the work you're doing.
16	Are your research plots, are they
17	in organic - certified organic production?
18	DR. JOHNSON: I've got them in what
19	I call transition right now. And, in fact, I
20	really have only ever used manure in there to
21	fertilize them and things like that.
22	I'm trying to keep the nitrogen as

1	a susceptibility factor in fire blight. So,
2	if you put the N up in a block of trees, you
3	make it worse.
4	So, I have very low - I call them
5	low-input orchards. We don't spray the
6	insecticides or anything in there.
7	I do a little bit of scab control
8	because of our cooler climate.
9	MR. FELDMAN: I'm just wondering if
10	you've noticed over the years or suspected any
11	changes in cultural or management practices -
12	you mentioned the N - or other types of
13	management practices that have reduced the
14	pressure, the fire blight pressure.
15	DR. JOHNSON: Well, you know,
16	nitrogen is not - I mean, if you're going to
17	grow apples for storage, nitrogen is an
18	important factor for like post-harvest rots
19	and things like that.
20	So, nitrogen is very carefully
21	managed in fruit trees. You don't want too
22	much of it.

You have to replace the wood, you 1 have to grow the fruit, but you don't want any 2 3 extra nitrogen in those fruit when they hit the storage. So, it's very, very carefully 4 managed in a commercial orchard. 5 I would say I'm sub - because I'm 6 7 not interested so much in producing fruit, am suboptimal with nitrogen in my I 8 9 research orchards. MR. FELDMAN: But can you imagine 10 11 that there are other factors, say in an 12 organic system, that might contribute increase tree health, greater resistance, 13 aside from the variety issue, greater tree 14 15 health, ability to manage, withstand pressure, the fire blight pressure? 16 DR. JOHNSON: Yes. Yes. 17 Sure. 18 It's - I mean, the way you look at most modern 19 high-density production orchards right now, I 20 would say that in an organic situation those are minimal. 21

another project that

I've

got

1	doesn't deal with organics at all. It's in
2	conventional. But we're working on systemic-
3	acquired resistance, which are synthetics that
4	can manage susceptibility of trees and health.
5	If you do get fire blight, you can
6	slow the run of - but I don't really - I don't
7	think that that would be an organic strategy,
8	but that is something we're actively involved
9	with, as well.
10	MR. FELDMAN: Thank you.
11	CHAIR MIEDEMA: Thank you.
12	DR. JOHNSON: All right. Thanks.
13	MR. McEVOY: Clarification on the
14	tetracycline question. Tetracycline is not
15	part of Sunset 2012. So, any action that you
16	made on changing the expiration date or the
17	annotation for tetracycline would be a
18	separate rulemaking action by the Program.
19	But we do those kinds of things
20	all the time, but it would not be part of
21	Sunset 2012.
22	CHAIR MIEDEMA: Thank you. John,

1	please proceed. Let's try to work through
2	another material or two.
3	Any more discussion on
4	oxytetracycline?
5	MR. FELDMAN: I just - I want to
6	sort of integrate some of these issues,
7	because there's some similarities emerging for
8	me in these patterns.
9	And going back to what Colehour
10	said on the ethylene gas, I heard testimony
11	yesterday, and then follow-up conversation,
12	about this issue of attention to soil health
13	and diversity - biodiversity in the orchard
14	affecting decreased pressures of, you know, in
15	terms of fire blight, which I think we're
16	missing in some of this discussion.
17	Some of that may go to scale.
18	Again, you know, which we were talking about
19	with the pineapples, you know. So, I don't
20	know how we sort that out.
21	But it seems to me if we're aware
22	of a scale issue that is creating - scale

meaning size of production - lack of attention to diversity on the farm and plant health, and if that -- if somehow the size of the production is affecting the vulnerability to or the pressures of fire blight, we should know that. We should factor that in to our conversation.

We may want to hear more from the organic fruit tree folks who are here today and tomorrow on that issue. Because if we're dealing with, you know, commercial operations that have converted from -- which is a good from thing converted conventional operations, we're missing and somehow something in the management practices that are incorporated into smaller scale operations that have reduced the pressures of blight, I think we're missing an important part of the discussion, which we seem to be getting into with the ethylene gas discussion.

CHAIR MIEDEMA: John, I'm going to

MR. FOSTER: I'm sorry.

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What?

1	give the control of the meeting back to you.
2	MR. FOSTER: Thank you.
3	I'm thinking now if we can jump
4	quickly to nickel before the break. I sense
5	a break is not far away, and I suspect that we
6	might be able to cover nickel and be done with
7	petitioned items, hopefully.
8	That's just a guess, thinking it
9	might happen quickly, if we could do that
10	before our break.
11	I think some of the more
12	contentious Sunset items are not going to get
13	done before our break. So, I'd rather have a
14	clean break, as it were.
15	So, questions about nickel
16	petition, a petitioned item. The nickel being
17	added to the list of allowed micronutrients.
18	Katrina.
19	MS. HEINZE: I'm not sure how to
20	organize my questions on this one. I guess
21	I'm confused by the criteria - the material
22	evaluation checklist, I can't remember what we

1	call it, and some of the Committee's
2	responses.
3	So - and I just have some
4	examples. I'm not sure you want me to go
5	through all of them.
6	So, for example, in Category 1
7	where there's a question about is the
8	material harmful. So, Question Number 9.
9	So, the Committee said yes. But
10	the TR says if this material is used
11	correctly, there are no effects.
12	And I saw that in a couple places
13	where it appears that what the Committee said
14	is, if the material is used outside of the
15	normal realms, there could be harm. And that
16	feels like a different approach in how we've
17	usually evaluated materials.
18	So, I was hoping that we could
19	have some discussion on that, maybe first. I
20	have some other questions.
21	MR. FOSTER: Okay. This did come
22	up and we discussed kind of as background and

foreground a little bit the question about 1 whether we should be using this checklist and 2 3 considering substances in what I call the more global sense, that is, all of the - in the 4 case of nickel, all of the mining, all of the 5 smelting, all of the refining, or do we look 6 at the checklist in the context of a specific 7 use? 8 9 And this - we actually had a fair amount of discussion on this and intend to ask 10 11 the Materials Committee for direction. 12 Because I think that when you're looking at petitioned items, particularly on 13 the checklist, there are certain assumptions 14 15 made by everyone bringing, you know, their expertise to the table. 16 17 And whether or not you consider 18 materials in this more global sense -- or this 19 more acute, directed, annotated sense -will 20 change how the checklist gets filled out. So,

I was in the minority opinion on

21

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that was a question for me.

1	this particular vote, in terms of full
2	disclosure. So, I tend to look at it, I
3	think, a little bit differently than the
4	majority did.
5	And, hence, the - I don't want to
6	be the one to speak for the majority on this,
7	which - yes, I'll stop there.
8	Katrina.
9	MS. HEINZE: Okay. So, I can say
10	that I think I believe that past practice of
11	the Board has been to review it in the
12	petitioned use.
13	But I know that we, specifically
14	Jennifer, has agreed to work with the Program
15	and collect some of that historical record to
16	come to the Committee with a recommendation so
17	we can provide some guidance on that.
18	MR. FOSTER: Yes, that would be
19	helpful.
20	Does that help kind of somewhat
21	answer your question?
22	MS. HEINZE: It does. I guess what

1	I would take from that is it appears that some
2	of these answers are different, or that the
3	majority chose to answer in a way that's
4	different than our historical practice.
5	That may or may not be material,
6	but just folks should be aware of that.
7	MR. FOSTER: Thank you. More
8	questions on nickel? Jay.
9	MR. FELDMAN: Well, can I quickly
10	respond to that?
11	I'm glad the Committee is taking
12	this up, the Materials Committee, in terms of
13	settling this issue, because I believe that
14	the Act, you know, the law really does
15	instruct us to look comprehensively at the
16	impact of products across our environment in
17	terms of organic being a steward and leader,
18	gold standard for how we think about the
19	impact of our practices on the sustainability
20	of our planet.
21	So, if we're relying on a material
22	that in some way is harmful in its production

harmful in its secondary impacts, 1 or is organic tells us and instructs us by law to 2 3 consider those factors. Because as organic consumers are 4 telling us, we don't want to take an action in 5 terms of the purchasing of food, that could 6 7 have adverse impact on the sustainability of the planet. 8 9 We may be doing something that contributes qlobal warming, 10 to but in 11 ingesting the food commodity that we just 12 purchase as having no adverse affect on us. Does organic require us to look at 13 the impacts and input we'd be having on global 14 I believe it does. 15 warming? We should know that, at least. 16 should consider it, at least, as an adverse 17 18 affect. 19 Now, in the case of nickel, 20 have that issue because of the harmful issues 21 associated with manufacture, production, 22 disposal, etcetera.

But we also do have a material that is a known human carcinogen - and, by the way, there aren't many known human carcinogens identified by EPA.

One of the other - coincidentally, one of the other known human carcinogens identified by EPA is arsenic. And we as a community, regulated arsenic well, well, way, way, way before EPA ever did, because we brought this ethic of harm to our decision-making process.

We didn't use another agency standard, which is very different than the Organic Foods Production Act ethic.

And so with nickel being a known human carcinogen and the canopies of pecan trees being 150 - as high as 150 feet, and knowing about drift, volatility, vaporization, movement off target site, it's a very difficult balancing act when you're talking about a known human carcinogen being used in that manner.

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1	I mean, we had the discussion
2	earlier about pheromones and all these inerts
3	which we accept in the context of a very
4	narrow use where we're not emitting sprays,
5	because we know what emitting sprays means.
6	It means it goes off the target site, it has
7	unintended affects, it's not organic in that
8	context.
9	This is another example of that.
10	This is a product that is a known human
11	carcinogen being used in a manner that you
12	can't control, unfortunately.
13	MR. FOSTER: Katrina.
14	MS. HEINZE: I understand that
15	perspective. Mine is more of a procedural
16	question.
17	So, for example, looking at
18	Category 1, Question Number 9, which says "Is
19	there undesirable persistence or concentration
20	of the material or breakdown products in the
21	environment?"
22	So, that's one of our criteria.

1	The Committee answered yes, and then quoted
2	from the TR which says, and I'm reading from
3	what you guys filled out, "When used
4	correctly, the TR notes no such effects."
5	So, this is - my question is more
6	procedural, so that we're all kind of reading
7	from the same playbook here.
8	So, I'm glad the Materials
9	Committee is taking this up. It is confusing
10	to me that the TR says there's no such
11	effects, but that you answered yes to the
12	question.
13	And I know I can pull up other
14	questions like that. And, again, I think not
15	probably material to how people are going to
16	vote, because everyone can read that, but I -
17	we probably just need to get aligned on how
18	we're going to answer those kinds of
19	questions.
20	So, I get your point.
21	MR. FELDMAN: But read the next
22	sentence. I mean, the next sentence refers -

they refer to an ATSDR document that indicates 1 that the effects are immeasurable because of 2 3 the way it's used. So, again, we have to take that 4 into account. Often what we're faced with is 5 a known effect by a cancer-causing chemical 6 7 that has an exposure pattern that is not fully quantified or even qualified. And, therefore, 8 9 you don't get the kind of research that you need to answer that question specifically. 10 11 But if you read the document 12 that's cited there and linked to by the TR, this Agency for Toxic Disease Registry, it 13 "it is impossible to predict 14 says that 15 nickel's environmental behavior on a general basis." 16 17 So, you put - it's a puzzle. 18 I think that's our job to put the pieces of 19 that puzzle together. And where there are 20 missing pieces, we have to obviously factor that in as well. 21

unfortunately, none of this

1	stuff is - you cannot always wrap a tight,
2	easy bow around it, but I think there's enough
3	information there, knowing what we know about
4	the harm of this chemical, knowing what we
5	know about the use pattern, that we can't deny
6	that it's going to have some detrimental
7	impacts.
8	MR. FOSTER: Thanks. Other voices?
9	I want to make sure we've gotten lots of
10	opportunity for other concerns, other tracks
11	here.
12	(No response.)
13	MR. FOSTER: All right. Enough for
14	nickel.
15	CHAIR MIEDEMA: Thanks, John.
16	We're going to take a break now and come back
17	and address the rest of the Crop Committee's
18	work and have a chance for discussion.
19	Quick note on Committee
20	deliberations. My comment this morning was
21	that in a spirit of collegiality if we could
22	keep our discussion clipping along, we

1	wouldn't need to sort of impose the Robert's
2	Rules protocols.
3	But we're more than an hour off
4	schedule, we're in our first committee. If we
5	multiply this out, we are far from complying
6	with our federalregulations.gov notice of when
7	the meeting would end today.
8	So, we've got to pull this back
9	into shape here. That means each NOSB member
10	has two turns to speak on a topic or ask
11	questions. And you get your second turn after
12	everyone else has taken the first turn, if
13	they want it.
14	Okay. So, that's what we'll be -
15	that's how we'll be operating when we get
16	back. 15 minutes.
17	(Whereupon, the proceedings went
18	off the record at 10:15 a.m. and resumed at
19	10:39 a.m.)
20	CHAIR MIEDEMA: We have quorum, and
21	we're back in session. Chairman of the Crops
22	Committee, John Foster, please proceed.

1	MR. FOSTER: All right. We're
2	going to move into discussion of Sunset items.
3	Thought there was a fairly good suggestion
4	about moving through, hopefully trying to
5	catch up a little bit, moving through
6	materials that tend to be less controversial.
7	There are, as you know, fewer on
8	the Crops docket that are less controversial
9	than more so. So, please bear with us.
10	And I'm going to base these kind
11	of - the shuffling based on our Committee
12	discussion. So, we'll - I would like to kick
13	it off with chlorine materials.
14	And, particularly, if we could
15	discuss, Nick, the thing you had mentioned
16	about is "should" the right word, and then
17	also if it's apropos to well, with start
18	with there and see where it heads.
19	Nick, go on ahead.
20	MR. MARAVELL: Yes, it's really
21	semantics here. When you put things in
22	regulation, "shall" and "will" have different

1	meanings. And "should," and I don't know what
2	"should" has in terms of regulatory. So, I
3	would usually use "shall" or "will."
4	"Will" is more optional. "Shall"
5	is mandatory. And "should" is sort of
6	suggestive.
7	So, you know, I'm just saying,
8	what message are we trying to give here?
9	Minor point.
LO	MR. FOSTER: Now, I assume, is not
11	necessarily the time for Committee
L2	deliberation on changes, but we can certainly
13	take that up. And I think there would be a
14	general acceptance of - my sense is from
15	hallway conversations, that that's an
16	appropriate change to make.
L7	Other questions on chlorine items?
18	(Pause.)
L9	MR. FOSTER: I'm sorry for the
20	hesitation here. I'm just - I'm not the
21	right-handedness to be sitting here,
22	apparently.

1	(Laughter.)
2	MR. FOSTER: Thanks very much. Now
3	I know why I sit at the other end of the table
4	at Thanksgiving.
5	All right. So, I am guessing that
6	copper we're going to spend a little more time
7	on. I'd like to skip down to alcohols and
8	field any discussion questions about that.
9	(No response.)
10	MR. FOSTER: All right. Well, that
11	went quick.
12	I'd like to move on to newspapers,
13	recycled paper, no colored or glossy inks.
14	Both listings for those, any questions?
15	(No response.)
16	MR. FOSTER: All right. We'll be
17	back on schedule in no time.
18	Plastic mulch covers. Barry, you
19	had mentioned a couple things you may want to
20	elaborate on.
21	MR. FLAMM: Yes, and I neglected to
22	mention a comment we received from CCOF which

1	although they support the continued use of
2	plastic mulches, but raises the question of
3	why it's listed at all.
4	And I'll just sort of paraphrase
5	what they said. These are not inputs to soil
6	or crops, do not decompose. They are tools
7	that are allowed whether or not listed. And
8	using as examples, drip tapes, tractor tires
9	and so forth.
10	I just want to point that out
11	that that's a different question that was
12	raised.
13	MR. FOSTER: A good question. And
14	in our Committee deliberations, we recognized
15	it as a good question, but probably one that
16	is going to require a little more - a little
17	more digging than just using it in the context
18	of plastic mulch covers, I assume.
19	Other questions, concerns on that?
20	Mac.
21	MR. STONE: And, Barry, you
22	mentioned that it was in the Act about removal

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1	of the plastic at the end of the crop.
2	So, I'm still just curious about
3	double-cropping if the quality is there,
4	that it not have to be removed at the end of
5	the crop or the end of the season part of that
6	discussion.
7	MR. FLAMM: I don't know if I can
8	give you a great answer. But it would seem
9	like as long as you're still farming for that
10	season, I think that's something you have to
11	work out with the certifier, but it would seem
12	like at the end of the season when you got
13	done cropping.
14	MR. FOSTER: Other questions on
15	plastic mulch?
16	All right. Colehour.
17	MR. BONDERA: I don't know if I
18	have a question, but I just feel like that
19	issue that you bring up, Mac, is pretty
20	important, because I think that perennial
21	crops where people are using that kind of
22	protection, you know, it's hard to define that

1	seasonal question.
2	And I think that that's why, you
3	know, "after one year" is in there, because
4	what does plastic do? It starts to get stuck
5	in and be hard to remove, no matter, you know,
6	if it's among trees or not.
7	And so, I think that that - there
8	has to be something to - I mean, I think it
9	can be interpreted and there can be
10	exceptions, but I think that you have to also
11	have some fine line.
12	MR. FOSTER: Barry.
13	MR. FLAMM: The additional language
14	is "after harvest." So, you can't in a
15	perennial orchard, you can't leave the plastic
16	in there, and you have to remove.
17	MR. FOSTER: All right. It looks
18	like we're good on plastic mulch covers.
19	I want to move down to Vitamin D3.
20	This is another - something getting rodents in
21	the cross-hairs, as it were.
22	Any questions on that?

1	(No response.)
2	MR. FOSTER: All right. I'm going
3	to go out on a limb and bring up sodium
4	silicate.
5	Any questions on that?
6	Yes, Katrina.
7	MS. HEINZE: Not a question specific
8	to sodium silicate, but, again, a process one.
9	As chair of the Materials
10	Committee, I am a little bit perplexed by some
11	of the Sunset recommendations. So, sodium
12	silicate is the first of these.
13	In going back and looking at our
14	procedures for Sunset, there is, you know, a
15	number of things we have to look at. But two
16	of the things are that we're supposed to look
17	at new evidence that is different from the
18	original NOSB review.
19	And for some of these materials, I
20	guess I need some help from the Committee
21	understanding what that new material is that

resulted in a recommendation not to re-list.

And then a recommendation not to re-list - or a recommendation, period, is really supposed to be based on the force of evidence showing that a change to the exemption is needed.

And that includes the fact that the - this Board, or a prior version of this Board, did a full review of the material and, in most cases, considered - well, in all cases unless there's new evidence, considered all the things that the Committee is debating and chose to list.

And, you know, with all due respect to the recommendations of the Crops Committee, it has been our practice as a Board to really try to respect the precedent of prior Boards.

And so, the materials were - I'm just not sure that there is - or it's not clear to me what the new evidence is that is causing the Crops Committee to recommend a change to the exemption, to kind of go against what a prior Board has recommended are sodium

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1	silicate, which we're on now - and I'm doing
2	this one so I don't have to do it again -
3	copper, sulfur dioxide, magnesium sulfate and
4	ethylene.
5	So, perhaps when we get to those,
6	just I would ask everyone the Board to think
7	about that and our responsibilities for
8	Sunset.
9	MR. FOSTER: Other questions?
10	Tina.
11	MS. ELLOR: If I could address that.
12	In the case of this particular material, what
13	we found when we - what came up during our
14	discussions in the Crops Committee is that
15	this not very much used.
16	Since then, you know, we've learned
17	from public comment that it's an important
18	material probably to keep on, because of its
19	compatibility with chlorine compounds that
20	lignin sulfonate doesn't have.
21	So, it's not a - it's not as we
22	thought, a complete substitute, you know, that

1	you can substitute lignin sulfonate completely
2	for this material. So, that's something we
3	learned in comment.
4	But during the Committee
5	discussions, you know, we looked for people
6	who were using it and we didn't find any. So,
7	that's where that came from.
8	And it's unfortunate that we don't
9	absolutely capture all of our Committee
10	discussions, you know, in our recommendation.
11	But, you know, I'd like to assure you that due
12	diligence is being done on the Crops
13	Committee.
14	MS. HEINZE: Oh, I had no doubt of
15	that. It's more the, you know, it is my duty
16	as Materials chair to make sure that we follow
17	our processes.
18	So, I appreciate the clarification.
19	That helps me as I think through sodium
20	silicate.
21	MR. FOSTER: Other questions?
22	Sodium silicate?

1	(No response.)
2	MR. FOSTER: All right. I'm going
3	to take a stab at ranking these and move on to
4	lignin sulfonate.
5	Sorry, Tina.
6	MS. ELLOR: Someone mentioned to me
7	during break, and I don't know if anyone has
8	any insight onto this, that it actually is not
9	a duplicate listing of lignin sulfonate,
10	because one is under, you know, plant and soil
11	amendments, the other is post-harvest. So,
12	one's pre-harvest and one is post-harvest.
13	Now, how it would be used as a
14	flotation device pre-harvest, I have no idea.
15	But apparently, you know, it is listed in two
16	different places for two different purposes.
17	MR. FOSTER: Any other questions on
18	lignin sulfonate?
19	(No response.)
20	MR. FOSTER: All right. Moving
21	right along, I'm going to go with magnesium
22	sulfate.

1	Any questions?
2	(No response.)
3	MR. FOSTER: All right. I suspect
4	we might have some questions about the next
5	one, whichever one it is.
6	(Laughter.)
7	MR. FOSTER: Let's talk about sulfur
8	dioxide.
9	Yes, Tina.
10	MS. ELLOR: Once again during the
11	break, our audience weighed in on this. And
12	at the Board's discretion, I'd like to have
13	OMRI come up and explain how this ingredient
14	works in rodent smoke bombs. And they gave me
15	a very good explanation over break, which I
16	would like everyone to hear.
17	Is Lindsay in the room?
18	MR. FOSTER: If you could come up
19	and state your name and affiliation, please?
20	MS. FERNANDEZ-SALVADOR: My name is
21	Lindsay Fernandez-Salvador. I'm with OMRI.
22	So, oftentimes the way that the EPA

registers pesticides is that -- in the case of smoke bombs, the three ingredients that you mention; sulfur, sodium nitrate and charcoal, are the ingredients in the actual thing that you buy at the store. But then when you employ it at your farm, there's a reaction that happens.

The potassium or sodium nitrate decomposes into sodium or potassium oxide, nitrogen gas and oxidant gas.

And then when sulfur is burned in the presence of oxidant gas, it produces sulfur dioxide. And that's what the EPA calls a post-reaction formula.

It's not considered the active ingredients on the label, which is why you discovered that those aren't the registered ingredients.

However, that's the way OMRI would review it -- is that it is in fact sulfur dioxide that is acting on the pest and meets the letter of the law in this case.

And just to give you an example of 1 something that is similar is peracetic 2 3 That is oftentimes listed as acetic acid and hydrogen peroxide on the label, but 4 clearly becomes peracetic acid as the post-5 reaction formula. Very common. 6 7 MR. FOSTER: Thank you, Lindsay. follow-up questions for Any 8 9 Lindsay? 10 Jay. 11 MR. FELDMAN: So, you don't think 12 it's necessary or required to look at the released into the 13 compounds that are environment or mixed as a function of using 14 15 the product? Because this is - when we looked at 16 17 this, as you know, I mean, even though they're 18 listing this active ingredient, there are 19 certainly other compounds in here that are -20 seem to be -- should be the subject of review, and we were wondering if we were doing our, 21

you know, due diligence in ignoring those

other compounds.

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And you're saying OMRI doesn't evaluate the - I mean, you're looking at strictly what EPA does. And I'm wondering if we have an additional responsibility beyond what EPA does in its registration process, to look at the other compounds that we know to be they're certainly because not inert ingredients. They're listed. We know what They're identifiable. they are. They're being put in the environment.

So, it was odd to us that we wouldn't be asked to evaluate that.

MS. FERNANDEZ-SALVADOR: Well, I think that's a question for the Board and not for OMRI.

I'm just saying that clarifying the inaccuracy or the misconception that sulfur dioxide is not in fact the case that acts on rodents in this, and that it is common practice that materials will then react to make the final post-reaction formula, which

1	OMRI considers or interprets to meet the
2	letter of the law in this case.
3	MR. FOSTER: Thank you, Lindsay -
4	I'm sorry. Lindsay, hold up. Katrina has a
5	question.
6	MS. HEINZE: We received several
7	public comments suggesting an annotation that
8	might clarify some of these.
9	I don't know if you've had a chance
10	to see it, and if you have any thoughts on
11	that recommendation.
12	You don't have to answer now if I
13	just put you on the spot.
14	MS. FERNANDEZ-SALVADOR: I didn't
15	see the public comment. But annotations that
16	clarify for people that don't understand
17	chemistry on the upfront, is helpful.
18	MR. FOSTER: Thank you very much.
19	MR. MARAVELL: Well, speaking as a
20	farmer, I would like this - when a farmer
21	picks up a product and looks at the National
22	List, there's got to be some way to determine

1	- I mean, if it says "sulfur" on there and the
2	National List says "sulfur dioxide," there has
3	to be something here to guide the farmer.
4	That's all I'm saying.
5	So, perhaps an annotation could
6	handle that. I don't know, but it would be
7	helpful.
8	MR. FOSTER: Might suggest that
9	would be more appropriate for guidance as
10	opposed to annotations, which generally speak
11	to use restrictions. But, yes, there's a
12	place for clarity, that's for sure, in some
13	way, shape or form. I agree.
14	Any other questions on sulfur
15	dioxide?
16	(No response.)
17	MR. FOSTER: All right. Moving on,
18	let's go with copper materials.
19	Are there any questions about
20	copper?
21	Jay.
22	MR. FELDMAN: Well, just to respond

1 to some of the comments, I'd be curious as to 2 whether anybody from the certifier or 3 inspector at inspection level sees this as a problem. 4 I read one or heard one comment 5 that said that the language wasn't specific 6 7 enough quidance as to how and when this monitoring would take place. 8 9 And I quess we were of the opinion that that could be determined in quidance, but 10 11 that there would be some sort of monitoring 12 mechanism. And we - I think part of the 13 conversation in the Committee was, we weren't 14 15 quite sure how one would make the determination 16 as to whether there was 17 accumulation if not, or you weren't 18 monitoring. 19 So, it was sort of odd to us that 20 there would be a quidance that there ought not accumulation without 21 be any sort of

monitoring.

1	Maybe there is monitoring going on,
2	but that's why we threw it out that way,
3	hoping to get more specific responses.
4	MR. FOSTER: I think we have a
5	comment from the Program.
6	Miles.
7	MR. McEVOY: Yes. This is Miles
8	McEvoy.
9	Yes, I think in my experience, the
10	certifiers are monitoring the use of copper.
11	And it all depends on the use pattern.
12	So, if there's a lot of copper
13	that's used in a given organic system, then
14	testing, soil testing or other types of
15	testing would be part of that organic system
16	plan to monitor that the - that copper is not
17	accumulating in the soil.
18	But it's going to depend upon how
19	much copper is being used, of whether or not
20	you would want to see specific monitoring
21	through testing to monitor the copper levels.
22	So, my experience is that

certifiers are doing the monitoring currently,
because they are checking the use of materials
with the existing annotations that are in the
National List.

And that, I guess, in addition,

And that, I guess, in addition, that if you did - the clarification for us is, what do you mean by periodic? How often does that mean?

And allowing us to do that through guidance probably makes a lot more sense, so that depending up on the use pattern, then the guidance or the certifier could determine what is the most reasonable monitoring for copper levels.

MR. FOSTER: Jay, a follow-up?

MR. FELDMAN: That raises a really interesting point, Miles, because we - I think the other thing we noted was that there is no use identified for this, you know, like with the antibiotics, we're talking about apples and pears, but the compound, the copper compounds are just allowed.

identify-use So, there's 1 no restriction. Although, I quess, you know, the 2 3 restriction would be on the presumably. 4 So, I quess my question is whether 5 we can put something in this language that 6 7 would enable the Program, or encourage the Program, to develop that type of quidance that 8 9 would -- based on a specific situation -need, require appropriate 10 require and 11 monitoring. 12 I mean, you say that the inspectors And I quess, you know, we didn't 13 do that. have that information, and we - I'm not sure 14 if everybody does it, if it's required that it 15 be done, or it's just normal practice. 16 17 I mean, it would be nice given how widespread this chemical use is, given that it 18 19 is prophylactic use, it's used in

preventive way, given that I often hear a lot

of criticism for all its use in different

circles, that we could have - we could have

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some readily available information that would 1 show we're really on top of it. 2 3 And if you said information already exists and it's trackable and disclosable and 4 monitorable, then that's fine, but we didn't 5 have that information. 6 7 MR. FOSTER: Miles, would you like to reply? 8 9 MR. McEVOY: Yes. The part about being measurable, trackable and disclosable is 10 11 - I'm not sure we can go there on that. 12 I think you have to keep in mind that there are a huge diversity of cropping 13 the world. Just within 14 systems around 15 Washington State, there's a huge diversity of cropping systems and uses of these various 16 17 products. There's certainly a need for 18 additional quidance on a whole range of 19 different products. 20 And we're going to continue to develop draft quidance and final quidance on 21 22 a variety of different products, but I think

1	we also need to be respectful and reasonable
2	in regards to the regulations and the record-
3	keeping requirements for growers, for
4	livestock operators and for processors and
5	handlers, because it can become so burdensome
6	that they're going to start to leave organic
7	production from the record-keeping and
8	requirements.
9	MR. FOSTER: Thank you, Miles.
10	Mac, you had a question?
11	MR. STONE: I guess I'd just add as
12	a certifier, it's mostly an issue on perennial
13	crops. Any annual crops, they're in the
14	rotation anyway and there tends not to be that
15	issue.
16	But if we do see it being used in
17	perennial crops, then it is noted by the
18	reviewer. They ask the inspector to look
19	tighter at the records, how much they're
20	purchasing, what they're using, etcetera.
21	So, it kind of is naturally - this
22	one has always been on the radar of certifiers

1	and inspectors because of that.
2	And the growers are concerned that
3	they're going to get cut off, and then they
4	don't have the tool anymore.
5	MR. FOSTER: Thank you, Mac.
6	Any additional questions on copper,
7	copper materials?
8	(No response.)
9	MR. FOSTER: All right. Thank you.
10	I would like to bring up ethylene
11	gas, please. Any questions, clarifications on
12	ethylene?
13	Tracy.
14	CHAIR MIEDEMA: I just had one point
15	of discussion.
16	Colehour, you had mentioned that
17	our materials, I think the way you said it,
18	don't apply abroad and there weren't - you
19	hadn't taken a look at growing practices in
20	other countries.
21	And my understanding is that all
22	produce coming into this country and labeled

and sold as organic in the U.S. has to comport 1 with NOP standards; is that correct? 2 3 That's basic. So, I just want to make sure that we don't go on record ignoring 4 important growing regions' practices for crops 5 that are imported into this country. 6 7 MR. FOSTER: Colehour. MR. BONDERA: Thank you. Yes, I 8 9 think that my point was more regarding the fact of looking as a committee at the use of 10 11 ethylene qas in other circumstances, 12 trying understand alternatives and to understand how the decision processes were 13 made or used or what was being done. 14 15 Ι think, you know, you are 16 absolutely right, that anything that have, you know, USDA approval on it has been 17 18 certified. And I think that - I think that the 19 20 point was, you know, are we limiting ourselves or broadening ourselves by -- are we looking 21

at the whole picture, or are we just looking

at one little example?

And I think that I was trying to make sure that people keep the whole reality in mind, not the, you know, we had - we tried to look at some examples that were not necessarily, you know, certified for export to the United States, but how did they address this, so that we were looking at various options to some degree.

I don't know if that totally addresses what you're raising. But I think what you're raising is very relevant, because I think that, you know, it goes back to that question of reaction versus action. And I think that that was, I think, part of my point.

MR. FOSTER: Thank you. Nick.

MR. MARAVELL: Yes, something in the back of my mind, and perhaps people here could correct me.

About 20 years ago when this was all sort of rolling around, the producers from

1	Costa Rica, because I knew one, were saying
2	that there wouldn't be no ability to produce
3	pineapple for import into the United States
4	without ethylene gas.
5	I'm not at all an expert on this.
6	I just raise that as, I think, as part of the
7	rationale, perhaps, as to why the Board took
8	action.
9	So, I don't know if any new
10	information has come to light. That's all.
11	MR. FOSTER: Tracy.
12	CHAIR MIEDEMA: Just a point of
13	clarification.
14	Nick, your friend might have been
15	referring to ethylene gas being used as a
16	ripening agent as a handling material
17	rather than as a crop material.
18	MR. MARAVELL: No, I think this was
19	to set flower. No, this was very definitely -
20	it was a production issue.
21	I haven't seen him in years, but I
22	remember that. And I've been to Costa Rica

1	and didn't see him. So, I don't know where he
2	is.
3	(Laughter.)
4	MR. FOSTER: Too late now, Nick.
5	Any other questions, comments on
6	ethylene?
7	(No response.)
8	MR. FOSTER: Okay. If not, I have
9	one.
10	This is one of the votes for which
11	I was absent. I would have voted a different
12	way than the majority on this.
13	I'm very reluctant to take tools
14	away from farmers. Just as a matter of
15	practice having been one, I think farming is -
16	certainly organic farming is hard enough.
17	And I really - I understand that a
18	lot of the NOSB job is about materials and -
19	I'm just generally very reluctant to do so.
20	What I saw in the way of public
21	comment and what I saw in past Board
22	decisions, seem, to me, to be still valid.

And my sense, and this came up in Committee 1 discussion, was that there's an undercurrent 2. 3 of scale issues around this material. And that's fine and appropriate. 4 And, Jay, I think it was you that mentioned 5 scale being certainly a point to consider. 6 7 I want to make sure that whatever happens, that I think the scale dialog 8 9 question is a good one, but that's probably a question beyond the realm of just ethylene. 10 11 It's been an undercurrent since 12 I've been attending NOSB meetings. In my work in certification, inspection, farming, it's 13 always an issue, and I think it's a worthy 14 15 one. And if we want to take it up as an 16 independent issue, I think that's fine. 17 I want to make sure that votes on materials 18 19 are based on the merits of materials and not 20 a vote about scale. And everyone's got their own, you 21 22 know, way to make that determination and I

1	trust that. But I do want to call it out
2	because ethylene, the discussion, this is one
3	of the first places that when pushed on
4	rationales to defend a particular vote, the
5	comment about scale came up more and more
6	readily.
7	And to me, that means an
8	undercurrent that's a little stronger than
9	other undercurrents that may have been present
10	in discussions around other materials.
11	A very important discussion to
12	have, and it's one of actually the most
13	invigorating discussions in the public
14	discourse as far as I can tell.
15	I just want to make sure that while
16	that has a bearing on ethylene, I get that.
17	I don't want to - I want to make sure that
18	it's couched in the right way and given the
19	appropriate weight in everyone's decision.
20	That's all.
21	Jay, yes.
22	MR. FELDMAN: Yes, and it comes up

1	in some instances more than others. It's just
2	in this case it wasn't a question of whether -
3	and this goes to the question of essentiality,
4	right?
5	Because when we looked at it, it
6	wasn't a question of whether it could be done
7	with ethylene gas. The answer was, yes, it
8	can be done without ethylene gas.
9	And then the question - next
10	question was, can it only be done on a small
11	scale with ethylene gas?
12	So, we were faced with having to
13	answer that question. It wasn't - we didn't
14	go searching for that question. It came to
15	us.
16	And so, I don't know how - I mean,
17	that's why I raised it earlier because it, you
18	know, in Hawaii it seemed like it was only
19	affecting one grower and it wasn't going to be
20	a substantial impact.
21	I'm not sure - I mean, you may
22	remember that better than I do, Colehour. But

1	in the case of Costa Rica, it seems like it
2	would have, you know, a major impact on large-
3	scale production.
4	Whereas around the world it looks
5	like the answer is, no, it wouldn't, at least
6	as far as we can tell.
7	MR. FOSTER: Thanks, Jay.
8	Any other questions?
9	Mac.
10	MR. STONE: Is the issue about
11	uniformity of ripening time so they can
12	harvest like once through the field? They
13	don't have to harvest more than once through
14	the field?
15	MR. FOSTER: All right. Any other
16	questions, comments on ethylene?
17	(No response.)
18	MR. FOSTER: All right. Moving on,
19	I'm going to again rank. Let's try
20	pheromones.
21	Any questions on that issue?
22	Tracy.

1	CHAIR MIEDEMA: I had one.
2	Jay, you had mentioned that the
3	inerts would need to be approved inerts and a
4	proposed annotation for these mating
5	disrupters, and you and I are both sitting on
6	this Inerts Working Group.
7	We know the pace of that work is
8	going to be pretty slow. It's not going to be
9	aligned with what we're voting on here today.
10	So, I didn't understand what you
11	were referring to when you said "approved
12	inerts."
13	MR. FOSTER: Jay.
14	MR. FELDMAN: The intent there is to
15	try to be respectful of whatever pace that
16	moves at, but to recognize that whatever is
17	legal, can be used.
18	So, if we - if we as a Board
19	respect List 3 until we get the working group
20	resolution on this, it would remain allowable.
21	I mean, the intent is to not take
22	away any tools here. The intent is to hold

harmless everything that's in use currently. 1 But just as in other areas, we're 2. 3 not - we've asked petitioners on a number of products, EDDS and some others, to withdraw 4 their petitions pending our discussion on 5 6 inerts. 7 As things stand now if I come up with a new inert, it could possibly be added 8 9 a pheromone formulation the way it's written. 10 11 So, this would keep us in line with 12 that, the resolution that we come up with in the working group and allow current uses to 13 remain in use. 14 And then when the new determination 15 is made on what we do with inerts, it would 16 incorporate those inerts into the pheromones. 17 18 MR. FOSTER: Katrina. 19 MS. HEINZE: I am not the expert on 20 inerts, but my understanding was that if someone comes up with a new inert, they can't 21 22 use it because we're kind of frozen right now,

1	right?
2	So, I guess I don't understand what
3	you just said.
4	MR. FELDMAN: Well, we've asked them
5	to withdraw - the petitions that are before us
6	have been withdrawn.
7	It's not clear that they can't use
8	it, you know. It's not clear that they even
9	have to petition, because they don't have to
10	disclose inerts. There's no requirement for
11	disclosure of inerts.
12	CHAIR MIEDEMA: I recognize the
13	Program.
14	MR. McEVOY: Yes, that's not
15	correct. They have to disclose all the
16	ingredients that are in these substances that
17	are used in organic farming systems.
18	That's part of the process. That's
19	what certifiers, that's what OMRI and WSDA do.
20	When they review substances for
21	allowance by organic producers and handlers,
22	they look at a full disclosure of all the

1	ingredients, including the inerts.
2	So, the only things that can be
3	used are the things that are on the National
4	List if they're synthetic, which would be Lis
5	4 inerts and List 3 inerts for passive
6	pheromone dispensers.
7	And the other question the Program
8	has is what does the Committee mean by without
9	added toxicants? It's undefined in your
10	proposal.
11	MR. FELDMAN: The intent there -
12	well -
13	MR. FOSTER: Yes, go ahead, Jay.
14	MR. FELDMAN: So, we, when we're
15	looking at individual - when we're looking at
16	a pheromone product, a formulation, we don't
17	know what's in that formulation.
18	We know it has a pheromone and an
19	inert. It could be on List 3. It could be on
20	List 4.
21	Are you saying that if a
22	manufacturer comes up with a new inert, the

1	Program is not going to recognize it if EPA
2	accepts it, until this working group can
3	finish its work?
4	Is that what you're saying?
5	MR. McEVOY: Yes, the List 3 and
6	List 4 inert lists are frozen. They're not
7	being changed. EPA is not modifying those
8	lists.
9	So, there's no way that EPA is
10	going to be adding other substances to those
11	lists at this time.
12	MR. FELDMAN: Okay. Well, we should
13	talk about this at Committee then. I mean, if
14	it's a finite list and we're not adding any
15	toxicants, then it's redundant - what you're
16	saying is it's redundant of what is currently
17	the status quo, correct?
18	MR. McEVOY: Well, I'm not sure if
19	it's redundant. We don't understand what you
20	mean without added toxicants. You haven't
21	defined that.
22	And the current list, the current

way that pheromones have to be formulated to be approved is that they can use List 3 inerts. And that has to be disclosed as part of the process that a certifier would use to allow a certain substance to be used in organic production.

MR. FELDMAN: Yes. The problem in this area is that we're told something is a pheromone. It can have any number of ingredients in there.

All we're told is it's a pheromone.

And when we look at pheromones that are available in the market - I apologize that my back is to you. It's just hard to - we are - the Board - OMRI may have this information on a Confidentiality Agreement, but we don't know what's in that formulation. All we know is it's a pheromone. So, the process - explain the process to me.

OMRI then would evaluate it and determine whether it's a pheromone and a List 3 or List 4 inert. And we're saying that

there should be no other poisons mixed, no 1 ingredients or biologically 2 other active 3 chemically-active ingredients, which would be toxicants, mixed in with that formulation. 4 In other words, we've authorized 5 this huge category of all kinds of 6 7 formulations. And I quess what you're saying is that OMRI is monitoring that the - and 8 9 maybe we could get OMRI up here, which would be helpful to me - that they are evaluating 10 11 all the constituent compounds in that thing 12 that we call as a class, pheromones MR. McEVOY: Yes, it's true for all 13 things that are used, not just pheromones. 14 15 So, any kind of pest control input that an organic producer is using, all the ingredients 16 17 in that product are evaluated and have to comply with the list. 18 19 So, the active ingredient has to be 20 on the National List or a non-synthetic. the other ingredients have to be List 3 or 21

ingredients.

That's part of the

1	process.
2	It seems like possibly the Board
3	could use a more in-depth review of both the
4	material evaluation process in pheromones in
5	particular, and what are the compounds that
6	are in these substances.
7	MR. FELDMAN: Yes, it just covers
8	hundreds and hundreds of different compounds,
9	as I put up on that slide. I put up -
10	CHAIR MIEDEMA: Jay, just we're
11	going to stick to protocols here. We're at
12	the two limit for you.
13	Does anyone else have a comment?
14	MR. FOSTER: Question, Steve?
15	CHAIR MIEDEMA: Steve.
16	MR. DeMURI: Would it be possible to
17	get somebody from OMRI up here to explain
18	their process for pheromones specifically?
19	CHAIR MIEDEMA: Lindsay, would you
20	be willing to come back up?
21	MR. FOSTER: Just for the record,
22	name and affiliation. Thank you.

MS. FERNANDEZ-SALVADOR: Lindsay 1 Fernandez-Salvador, OMRI. And just for the 2 3 record, Mac stole my standards manual. I'm without my bible right now. 4 Okay. So, when OMRI would get a 5 pheromone dispenser application at our feet, 6 7 what we are interested in knowing is the manufacturing process of any ingredient that 8 9 they're claiming to be non-synthetic. otherwise, we would be reviewing all the other 10 11 ingredients like the inert ingredients, which 12 the EPA has established for us. We don't establish that they are 13 inert or pheromones. The EPA has established 14 that for us. 15 And what we would do is then ensure 16 ingredients, those inert 17 that those 18 ingredients are in fact on List 3 and that we 19 can consider the dispenser as a passive 20 dispenser, and that the pheromone in it is indeed classified as a pheromone by the EPA. 21 22 So, we rely heavily on the EPA

1	mainly because the regulations in terms of
2	pesticides and what are pesticides and what
3	are pheromones are referenced in the rule and
4	in terms defined. That's how we do it.
5	MR. FOSTER: Steve, did that get at
6	what you were looking for?
7	MR. DeMURI: Yes. Thank you.
8	MR. FOSTER: Okay. Thank you,
9	Lindsay.
LO	Steve.
11	MR. DeMURI: I get two. So, let me
12	direct another question - separate question
13	maybe to Mac who's our certifier
14	representative here.
15	When you certify a farming
16	operation that's using pheromones, do you
L7	require a certificate or something that shows
18	that they were OMRI-approved?
19	MR. STONE: OMRI or the other list
20	that's - the variable lists that are around,
21	but each certifier has their own list of
22	approved materials, if you will.

1	There's kind of a sharing of lists
2	and agreement sort of thing, but, yes, the
3	inspector does look to see that they are
4	legit, if you will.
5	MR. FOSTER: Thank you, Mac.
6	All right. Other questions on
7	pheromones?
8	(No response.)
9	MR. FOSTER: All right. Moving to
LO	by my reckoning, the last of the Sunset items
11	for Crops Committee. Streptomycin.
12	Any questions there?
L3	(No response.)
14	MR. FOSTER: Wow. Perhaps I had
L5	ranked them inappropriately.
16	MR. MARAVELL: Well, just a piece of
L7	information. I did talk to Dr. Johnson about
18	effectively when you spray with streptomycin,
19	are you just treating a tree or two that has
20	broken out with a strike?
21	And he says in reality when you're
22	at that point and you see the need to spray,

1	you spray the whole orchard. I mean, that's
2	what he advised, anyway.
3	So, I just thought I was confused
4	about that, and he has sort of said that you
5	pretty much - if you see the - and he said
6	this does not happen every year. He said you
7	could go five years and not have - at least in
8	his area, not have a fire blight problem.
9	But when you need it, you need it,
LO	is what he said.
11	MR. FOSTER: Thank you, Nick.
12	Are there questions on
13	streptomycin?
14	Mac.
15	MR. STONE: We heard some testimony
16	yesterday about that possibly it could be used
L7	post-strike, if that's the right term.
18	And in conversation, in some
19	climates you can plan on that, not use it
20	unless, first, if the modeling tells you or
21	then if you see an incident, then you could
22	react.

1	But in certain climates because of
2	weather patterns, you may not be able to react
3	in time if we just required it post-incident,
4	if you will.
5	MR. FOSTER: Other questions?
6	(No response.)
7	MR. FOSTER: All right. Moving on
8	then, we'll look at Sunset 205-602 for sodium
9	nitrate.
10	Any questions there on the
11	recommendation?
12	I believe Katrina has one. Okay.
13	Katrina.
	110.01.1110.1
14	MS. HEINZE: Someone else can go
14 15	
	MS. HEINZE: Someone else can go
15	MS. HEINZE: Someone else can go first. I'm still trying to find -
15 16	MS. HEINZE: Someone else can go first. I'm still trying to find - CHAIR MIEDEMA: I have a question,
15 16 17	MS. HEINZE: Someone else can go first. I'm still trying to find - CHAIR MIEDEMA: I have a question, John.
15 16 17 18	MS. HEINZE: Someone else can go first. I'm still trying to find - CHAIR MIEDEMA: I have a question, John. MR. FOSTER: Tracy.
15 16 17 18 19	MS. HEINZE: Someone else can go first. I'm still trying to find - CHAIR MIEDEMA: I have a question, John. MR. FOSTER: Tracy. CHAIR MIEDEMA: Which new

1 annotation?

MR. FOSTER: Well, I'll start the response. It's not intended to be the end all and be all, but the - some of the discussion has been that there have been the entry of additional agricultural materials that are more prevalent.

There has been a tremendous growth in liquid fertilizer, fish based, soy based, et cetera, other materials that were not in place 15 years ago.

As, actually, a function of number of things, the development of liquid fertilizers, and that's what we're looking at here primarily, fertilizers that deliver what's been described as a shot of nitrogen fairly rapidly.

There weren't as many other alternatives, agricultural alternatives as there is now. That was part of the discussion.

I think there was also sensitivity

1	to - and other Crops Committee, feel free to
2	jump in here - sensitivity to having a
3	material that came into the NOP program as a -
4	basically, what you like I said, used to be
5	called a restricted material. And it's been
6	in place a long time. And, however, you know,
7	everyone recognizes it's on 602 for a reason,
8	that there's at least a not insignificant
9	dissatisfaction with the material. Hence,
10	it's listing on 602.
11	And in effort to further encourage
12	that also in light of additional alternatives,
13	that kind of started to move the needle a
14	little bit, if you will.
15	And if other Crops Committee
16	members have more to add, you're certainly
17	welcome.
18	Katrina.
19	MS. HEINZE: Thank you. Sorry for
20	the delay there.
21	My understanding is that this is a
22	Sunset review. And so, this is - if that is

1	true, this is one where the Committee took two
2	votes. One to re-list without the annotation,
3	and one to re-list with what, I think, is the
4	current annotation.
5	Could you give a little bit of
6	background on the thought process there?
7	MR. FOSTER: I'm going to have to
8	ask a clarifying question.
9	The thought process beyond wanting
10	to have a backup recommendation?
11	MS. HEINZE: Yes, since you didn't
12	do that on any of the other Sunset
13	recommendations.
14	MR. FOSTER: My recollection
15	again, Crops Committee members, correct me if
16	I'm wrong - was that recognizing ahead of time
17	this was going to be a particularly
18	contentious issue, we were attempting to
19	respect that.
20	And, well, as you know, this
21	actually constituted a fair amount of
22	discussion among Crops Committee.

1	And I'm not certain of this, but I
2	am remembering that there was discussion, we
3	can check the minutes if you want, that that
4	was part of the rationale.
5	MS. HEINZE: Okay. So, two
6	thoughts. One, I appreciate that you on this
7	one, that you were transparent on following
8	last fall's recommendation on annotation
9	changes in Sunset. And I would encourage you
10	to do that on other annotation changes.
11	And then would I be correctly
12	interpreting these two votes then to say that
13	while the Crops Committee is recommending re-
14	listing - so, if you re-list without the
15	annotation, that means it becomes prohibited.
16	These two votes seem in conflict.
17	So, that's fine. I'll think about it some
18	more before Friday.
19	MR. FOSTER: Tina, and then Nick.
20	MS. ELLOR: I think in this case,
21	this is a prohibited material that's a
22	prohibited natural.

1	So, if it didn't get re-listed, it
2	would be open for all use everywhere.
3	MR. FOSTER: Hold on a second.
4	Nick.
5	MR. MARAVELL: Well, I'm going to go
6	way out on a limb here because I was on the
7	call, but not a member of the Board. That was
8	the day before.
9	And I can't remember, but it made
10	more sense to use when we did it. And we
11	really had a hard time - we knew we had to do
12	it right and we really had a hard time with
13	it, and we may have voted - the way they
14	appear here, sequentially, we may have voted
15	on them in the reverse order. I don't even
16	recall.
17	So, they're re-listed as is, but
18	then do it again with - but we were trying.
19	(Laughter.)
20	MR. FOSTER: Thank you, Nick.
21	Katrina, and then Barry.
22	MS. HEINZE: Okay. That was all
	l

1	super helpful. So, I think I got it now.
2	I don't think we've done a
3	prohibited since I've been on the Board. So,
4	these two are not in conflict.
5	What they mean is you want to keep
6	it on the prohibited list. Your
7	recommendation is to prohibit completely. But
8	if that can't pass, you want to keep it with
9	the current.
10	So, this all makes sense to me now.
11	So, you guys did a great job.
12	MR. FOSTER: Thank you for the
13	record.
14	(Laughter.)
15	MR. FOSTER: Barry.
16	MR. FLAMM: Been all said.
17	MR. FOSTER: Excellent. Any other
18	questions on sodium nitrate?
19	(No response.)
20	MR. FOSTER: All right. Well, look
21	at the time. Last item on the agenda is corn
22	steep liquor.
ļ	

1	Might we have some questions about
2	that?
3	(No response.)
4	MR. FOSTER: Wow. I seem to have
5	ranked these inappropriately then. I'll give
6	a moment for everyone to pull them up. Load
7	up, as they say.
8	(Pause.)
9	MR. FOSTER: Is anyone afraid to go
10	first? Is that the deal? I can't say I blame
11	you.
12	I can just start calling on people.
13	If there's no discussion, that's fine with me
14	too.
15	Katrina.
15 16	
	Katrina.
16	Katrina. MS. HEINZE: I just figured everyone
16 17	Katrina. MS. HEINZE: I just figured everyone was sick of my voice.
16 17 18	Katrina. MS. HEINZE: I just figured everyone was sick of my voice. I wanted to thank Jay for giving a
16 17 18	Katrina. MS. HEINZE: I just figured everyone was sick of my voice. I wanted to thank Jay for giving a brief overview of the November 2009

That being said, you did due to 1 lack of time, not intentionally, skip the 2 3 definition of chemical change. So, as people go through this, I just want to bring that to 4 the Board's attention. 5 I'm summarizing, but today 6 So, during my Materials Committee recommendation, 7 you'll get to see the full thing, that the 8 9 definition of "chemical change" says that chemical change is where the identity of a 10 11 substance is modified. 12 then there's a subsequent definition for "substance," 13 which is а compound which possesses a distinct identity. 14 15 And that's really critical to these 16 So, that was Materials chair, and now we're moving to Katrina's thoughts. 17 really an important point as we think about 18 19 any classification. 20 So, my specific thought on CSL, and I've always been confused by this, is we have 21 22 a process that takes corn, kind of digests it

1	through some biological processes, and then
2	results in a material that has, as long as I
3	can tell in organic, been classified as an
4	agricultural. And that's cornstarch.
5	And then the very same process,
6	like the other half of the stuff, is
7	synthetic. And I just struggle with that.
8	So, that's a comment. It doesn't
9	need an answer, but I do want folks to
LO	remember those definitions of chemical change
11	and substance as they consider this really,
12	really complicated topic.
13	MR. FOSTER: Thank you, Katrina.
14	Good reminder.
15	Other thoughts?
L6	Yes, Tina.
L7	MS. ELLOR: Yes, this is such a
L8	scary thing because it's so contentious.
19	From the beginning, we've had sort
20	of dueling experts. And from my point of
21	view, and I'm probably going to take some fire
22	for this, I think both have horses in the

1	race. And we have comments from Dr. Johnson
2	that are posted, and we were handed comments
3	from the other side yesterday.
4	So, I would urge everyone to look
5	at both sides very carefully. And it really
6	comes down to is there a chemical change, and
7	what causes that chemical change? Is it
8	biological, or is it chemical? And that's the
9	issue.
10	So, you know, it's a tough and
11	complicated thing. And Jay has done an
12	amazing amount of work on this, as has John.
13	And we looked at it for a very long time now.
14	And, you know, with fear of being
15	accused of not doing my job, I'd really like
16	to see the back of this one.
17	MR. FOSTER: Thank you, Tina.
18	Other comments or questions?
19	Tracy.
20	CHAIR MIEDEMA: The only thing I
21	have to add is that after the Crops Committee
22	concludes their deliberations, we are going to

1	break for lunch.
2	And I just want to make sure that
3	Board members, new members, existing members
4	or current members, I should say, old members,
5	that we really air out our differences, our
6	philosophical opinions if we have them, now,
7	and there are some judgments to make that are
8	just on the other side of science. We take
9	science as far as we can, and then we have
10	philosophies and judgments.
11	Let's make sure we get those aired
12	out today. Because when we get to voting
13	tomorrow, we will have more time for
14	discussion - or, sorry, on Friday.
15	Let's not start philosophical
16	discussion out of the blue on Friday.
17	MR. FOSTER: Thank you, Tracy.
18	Additional philosophical thoughts
19	on corn steep liquor?
20	(Laughter.)
21	MR. FOSTER: Well, new Board
22	members, you're in for a treat because you're

going to see some interesting - I mean, this 1 has really been a pivotal - I would say a 2 3 pivotal conversation in a number of ways, and I'm just going to leave it there. 4 5 Pretty much everyone knows my opinions about it. So, I don't need to 6 7 reiterate them. Although, I could, but no need to. 8 9 But I really - it sounds like if there's no more discussion on corn steep 10 11 liquor, I'll wrap up. 12 Okay. This corn steep liquor has kind of been - it's been such a touchstone and 13 a fire brand and a burning hot stove and a 14 15 number of other things. But through two iterations of Crops 16 17 Committee, I never - although I have opinions 18 about it, as does everyone, I really, and I 19 mean this sincerely, it was a real privilege

to see everyone working so hard in so many

ways and bring their A game all the time day

after day after day, call after call after

20

21

1 call.

And this includes past - the previous iteration of Crops Committee members, which we're buffeted by this just as much as the current iteration.

Jeff Moyer here, I'll just call you out and embarrass you, carried a lot of water on this for a long time, as did Kevin Engelbert in the prior iteration. And the whole group deserves a whole lot of credit.

And it was a real privilege. So, thank you for that.

Having said that, I'll wrap up on Crops Committee and close that out, and thank the Board and the Program and the general public for the indulgence of extra time.

CHAIR MIEDEMA: Thank you, Crops Chairman, John Foster.

For those of you in the audience who planned on hearing Livestock Committee before lunch, you'll have to hold tight until after lunch.

And one note to Board members with 1 our two-thirds majority for decisive votes 2 3 that we are making sure we adhere to from the OFPA, we're going to have some challenges. 4 5 So, let's make sure we don't get to Friday and have a lot of conundrum-type votes 6 7 where we can't get to ten and have to grapple and debate endlessly. 8 9 In other words, when you're a lead on a material, round up your votes and figure 10 11 out where people are at now. And let's sort 12 some of that stuff out over the next couple of days so we know what we're heading into on 13 Friday. 14 15 Last announcement is we've been provided by - with a list of farm-friendly 16 food by the Tilth Producers of Washington. 17 There's a nice map and menu options 18 19 on the back table. I just want to note that. And I want to extend an invitation 20 that they made to all of you and all of us on 21

Board and the Program, that

the

22

they're

1	hosting an event tonight starting at 5:30 at
2	the Palace Ballroom. And there's more
3	information on the back table from Tilth
4	Producers of Washington. So, 5:30. Palace
5	Ballroom. Everyone invited.
6	Let's be back in an hour at 12:45.
7	(Whereupon, the proceedings went
8	off the record at 11:44 a.m. and resumed at
9	1:03 p.m.)
LO	
11	
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L8	
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22	

1	A-F-T-E-R-N-O-O-N S-E-S-S-I-O-N
2	1:03 p.m.
3	CHAIR MIEDEMA: We now have quorum
4	and are back in session. We are ready to
5	begin deliberations of the Livestock
6	Committee.
7	Chairwoman Wendy Fulwider, please
8	proceed.
9	MS. FULWIDER: Okay. We have two
10	proposed recommendations that we will be
11	discussing today. And these were requested by
12	the National Organic Program to be part of a
13	comprehensive animal welfare program.
14	The Livestock Committee has been
15	working on this issue for several years. The
16	conventional dairy industry has just recently
17	started a program that they have in place that
18	they can point to when there is a problem that
19	hits the media.
20	And the goal of the Livestock
21	Committee is to propose a program that is in
22	the best interest of the livestock and the

farmers that will also assure consumers that 1 animals are well cared for and are allowed to 2 3 exhibit their natural behaviors. We have reviewed several animal 4 welfare quidelines, and we have worked with 5 Temple Grandin. 6 7 The Livestock Committee has spent countless hours discussing and revising these 8 9 documents. We have made revisions per public comment at this time, and we will review those 10 11 with you today. 12 We plan to present outcome-based standards species-specific 13 and quidance documents at the full meeting. 14 A proposed sheep guidance document 15 was provided to all of you yesterday during 16 the public comment. 17 And so, now Lisa has a PowerPoint 18 19 that I want to go through quick, and then we 20 will go through the edits on the documents. One of the public comments 21 22 about tie stalls and free stalls, and we have

1	made edits. That was an unintentional
2	omission in the edits when we were revising
3	documents.
4	So, tie stalls, we put the language
5	all back in the way it was intended to be
6	there. And for those of you that are not
7	familiar with tie stalls and free stalls, I
8	have a few pictures here.
9	And so, this is a traditional dairy
10	tie stall barn that is very common in the
11	industry. Especially on small, family farms.
12	And this would be the rear of the
13	cows in the tie-stall facility. And as you
14	can see, they are well bedded and clean and
15	comfortable and it's fine. And it's more
16	about management than it is about facility.
17	The free stall, this is a typical
18	well-designed, well-bedded free stall barn
19	with a mattress over the concrete. And this
20	is what we were talking about in the chart.
21	This is a loose-housing facility
22	here. And we want to make sure that everyone

1 understands that there is no housing system 2. better than any other when they're properly 3 managed. And the next photo is also the 4 inside of this loose-housing facility. 5 just happened to be here on a day when a calf 6 7 had just been born. So, the next one, this is some of 8 9 the numbers we looked at for dairy. Humane farm program requires 20 to 50 square 10 11 feet per cow in a loose-housing facility. 12 our proposed document for organic would be up to a 220-pound animal would require 15 square 13 feet in the bedded space. 14 And then we have all the other 15 numbers listed there. You can see up to 50 16 17 square feet for a dairy cow. 18 American Humane, they require 20 to

American Humane, they require 20 to 40 square feet per cow. And the Federation of Animal Science Societies, they require 40 square feet in a bedded facility for a dairy cow.

19

20

21

This is a swine document. This has 1 our original proposal. And I was very pleased 2. 3 to see all the care and concern that there is out there for organic hogs. 4 So, we did increase the numbers for 5 6 indoor space, as you can see here in the 7 document. And for outdoor space, we changed 8 9 it to be in line with other welfare organizations that require sufficient size to 10 11 allow all pigs to lie down at the same time 12 and to lie apart from one another in the outdoors. 13 And this one shows the Certified 14 15 Humane and American Humane numbers. And our 16 numbers are greater than both of these, but 17 our outdoor requirement is the same. 18 The Soil Association and the 19 Canadian documents are here, and we are very 20 similar to these. But for the largest finishing hogs, we're at 16 square feet for 21

indoors, and they are at 14.

And Global Animal Partnership, we 1 wanted to recognize their standards as well. 2 3 They don't use numbers, but they require sufficient size to allow all pigs to lie down 4 at the same time and apart from one another on 5 the indoors. 6 7 And of course their program is very different because they're all about 8 9 improvement. Gap 1, Gap 2, Gap 3. And on each time you'd make an improvement, you 10 11 require greater enrichments or space. 12 And this is Broilers. It's a little hard to see, but Humane farm requires 13 six pounds per square foot in a building. 14 3 requires that chickens must be able to 15 express natural behavior; standing, spreading 16 17 their wings, turning around, flapping their wings and preening, without touching another 18 bird. 19 20 Birds must have access to the 21 outdoor area, and 25 percent of the total

floor space of the house is the outdoor area,

1	from four weeks of age. And that is the third
2	level in the Gap program.
3	Our proposal is that there is one
4	square foot per bird indoors, and one square
5	foot per bird outdoors.
6	American Humane requires 6.2 pounds
7	per square foot indoors, 7.4. Six pounds, 1.2
8	square feet. And 8.7-pound birds would have
9	1.4 square feet.
10	The Federation of Animal Science
11	Societies would see a six to seven-pound bird
12	have 1.1 square feet. And of course with
13	those, there is no outdoor access required
14	with any of those.
15	Laying hens, Humane Farm requires
16	1.5 square feet in a single-level house, and
17	six inches of perch space for 20 percent of
18	the birds. If they're outdoors, then 2.5
19	acres per thousand birds.
20	Our proposal is 1.5 square feet,
21	and perch space for 20 percent of the birds.
22	And that would be a six-inch perch per bird.

If you have six inches of perch 1 space for every bird in the building, then it 2 3 would be at 1.2 square feet per bird. would require two square feet per bird outdoor 4 5 access. American Humane requires one to 1.2 6 7 square feet per bird, and two square feet outdoors for five percent of the birds in an 8 9 outdoor facility. The Federation of Animal Science 10 11 Societies requires 1.75 square feet per bird 12 if you have white leghorns, and two square feet per bird if you have medium-laying hen. 13 This document is what was proposed 14 in 2009 by the Livestock Committee, and I just 15 included it here so that you would be aware 16 17 that this has been put forth previously. 18 So, with that, if we would go to 19 the animal welfare document, and I believe the 20 first change that we made is in the Discussion section. 21 22 We deleted "contact with the soil."

And down in the next paragraph in indoor 1 stocking density, we added tie-stall and free 2 3 stall operations that have individual stalls are not included in the stocking density table 4 to clarify that issue. 5 Then in the Outdoor Stocking 6 7 Density paragraph, we deleted "frostbite" here, and I will read the entire sentence. 8 9 "Calves, lambs, kids and other young animals require protection from extreme weather 10 11 conditions and threat from predators." 12 The next change is in the Poultry paragraph. We deleted "paddock rotation." 13 created a lot of confusion. So, we just 14 15 deleted it. And we changed the next sentence 16 17 down there, "Porches or other areas with 18 floors and solid roofs will count toward 19 indoor space, if birds have unlimited access 20 to the space." In Definitions, we added on poultry 21 22 to clarify toe clipping and dubbing.

added a definition for "beak removal." 1 would be the removal of more than the beak 2 3 tip. And in Outdoor Access, we deleted 4 "bedding" in sentence, and made 5 the one another add in the previous. I will go 6 7 through those. "Animals have contact with soil 8 9 seasonally appropriate and the when overhead and without a solid roof or walls. 10 11 Fencing that does not block sunlight may be 12 used as necessary." deleted the Access to 13 We the outdoors part of the definition and just made 14 the one Outdoor access definition. 15 We added a definition for perches 16 17 that would be a rod or branch-type structure 18 that would serve as a roost. We deleted "an abundance of animal 19 20 life" in the Soil definition, and we also added that that would be a medium in which 21 22 plants may grow roots.

Then in the Livestock Health Care
Practice Standard, we made a few edits. We
eliminated the "competent" word and replaced
it with "trained" for folks that are doing
physical alterations to young animals.

And we also added beak tipping is

And we also added beak tipping is allowed and must be done no later than ten days old.

In the following practices that are prohibited, we changed the first sentence to beak removal, desnooting, caponization, dubbing and toe clipping of birds. And these would be prohibited.

To further define tail docking in sheep, we added that they should not be docked short than the distal end of the caudal fold.

In year-round access, we deleted "simultaneously" from the feeding sentence so that it now reads "the area shall be large allow all ruminant livestock enough to occupying these spaces to feed without crowding and without competition. They do not

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need to feed simultaneously." 1 Then we added shelter would be 2. 3 designed to allow for -- and down here below that are the additions - at least one feeding 4 space per animal in loose housing. 5 Then five here, at least one stall 6 7 per animal in the group or pen at any given time, that was already here, but we just made 8 9 a clarification. We also added in Six, that calves 10 11 over two months of age shall not be tied. 12 we eliminated the "until weaning" part of that 13 paragraph. Then we added the language here for 14 the tie-stalls and free stalls that was lost 15 2009 edit. So, that's not new 16 in the It was just unintentionally 17 language. 18 omitted, and it's been replaced. 19 Then in the Avian section, 20 deleted some language that's already in the rule. And we did add "Broilers will be 21

provided outside access by four weeks of age."

So, just a language change. 1 2 And the last sentence was changed to "Direct outdoor access to outdoor areas 3 will be provided during daylight hours when 4 temperatures are above 50 degrees." 5 In Suitable Flooring we added that 6 7 pellets could be used in drinking areas. this is primarily for smaller farmers. 8 9 then they wouldn't need to do a major overhaul

of their facility.

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And in the doors on the poultry buildings, we deleted "appropriately distributed around the building." And we moved the door language from below, up into this section.

Then in Five, we changed the wording a little bit. "Complete clean out of a poultry house is required if there have been adverse health issues with the previous flock; otherwise a clean layer of litter should be provided between flocks to maintain a sanitary environment."

In Space Allowance, the only change we made here is "stretch their wings." And the only difference this would make is that all the birds would not have to be able to stretch their wings at the same time.

Then before the space charts, we added a bit of language here. It says the values presented in the following charts are minimum amounts only. Producers will be comply with outcome-based required to standards to be developed and ordered to comply with the regulation. Tie and free exempt from the space stall barns are requirements in the chart, and they must provide one stall for every animal.

We changed the stocking rate to minimum space requirements, in the chart. And we changed some of the numbers for sheep. And this is primarily because sheep are only confined when they are lambing. And so, it's just a very temporary situation.

And then in the growing pigs, we

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1	increased all of the numbers. And we took all
2	of the numbers out for outdoor space and
3	changed it to sufficient space for animals to
4	all lie down and apart from one another. And
5	that would be at the same time.
6	And in the mobile poultry units, we
7	deleted all of the numbers in maximum number
8	of birds per acre.
9	So, those would be all of the edits
10	in this document. So, if anyone has any
11	questions or discussion about the changes in
12	this document?
13	CHAIR MIEDEMA: I have one. You
14	mentioned outcome-based measures and said that
15	operators would be required to comply. Yet,
16	we don't have those developed yet.
17	So, I was just confused by what you
18	meant there.
19	MS. FULWIDER: We plan on presenting
20	those in the fall.
21	CHAIR MIEDEMA: I wonder if instead
22	of saying that people are required to comply

1	with something that we don't have developed
2	yet, it might make sense to just kind of let
3	people know that those are in development.
4	MR. DeMURI: Not being close - not
5	being close to it, it appears to me like you
6	have addressed most of the public comment we
7	received yesterday that were opposed to your
8	original document.
9	Is there anything you're aware of
10	that has not been addressed at this point or
11	anything you do not agree with the public
12	commenters on?
13	MS. FULWIDER: The Committee feels
14	that we have addressed the comments that we
15	have received.
16	So, any other questions on this
17	document or -
18	CHAIR MIEDEMA: John.
19	MR. FOSTER: Sorry. Because of the
20	size of the file, it just took me a while to
21	get it. I know I'm going to have questions
22	about basically taking into comment public

1	comment, but a couple of specifics I have
2	concerns about. It's just going to take me a
3	minute to round them up.
4	I actually, I hate to admit it in
5	public, but I have a hard time seeing clearly
6	that far away.
7	(Laughter.)
8	MR. FOSTER: So, there it is on the
9	public record. I'm going to need a couple
10	minutes. If we can round - circle back at
11	some point, that would be nice. Thanks.
12	(Off-record discussion.)
13	MS. FULWIDER: So, Lisa, if you
14	would like to go to the handling and transit,
15	and then we'll circle back with any questions?
16	CHAIR MIEDEMA: Mac, go ahead.
17	MR. STONE: Wendy, we raise - we
18	have birds on pasture year round and I drain
19	the numbers. And on the Broilers, we're like,
20	whew, right at 1.2 square feet per bird by a
21	system that works for us.
22	But if we don't move those birds

1	twice a day, then we can get into coccidia
2	problems and such as that.
3	Is there - is it assumed here that
4	these birds are moving, or they can have that
5	one square foot per bird and not move?
6	MS. FULWIDER: Well, this is the
7	floor that we put in, you know. And if people
8	have more than that, I mean, that's better.
9	That's great, you know, but this is to be the
LO	base in the floor.
11	And so if they have more space,
12	that's wonderful.
13	MR. STONE: I guess I'm not sure how
14	they could do it organically with these
15	numbers if they're not moving or intense
L6	bedding management, I guess, is part of my
L7	question on the poultry specifically.
18	MS. FULWIDER: Well, I believe a lot
19	of organic producers, these are the numbers
20	that they are using.
21	Okay. So, Lisa. So, in this
22	document, the first edit we made here is in

the discussion and we moved the terms defined 1 2 that applied to handling, transport and 3 slaughter, from the other document. no change to the definitions. We simply moved 4 them here. 5 Fitness for Transport, we added 6 7 some clarifying language here. And this is in the discussion. 8 9 Livestock that are likely to be condemned or become downers, should not be 10 11 shipped. And that's what the language in this 12 statement is about. Because it talks about blind animals and people are saying, you know, 13 they still need to be transported. 14 And that's 15 true, and we don't have any problem with that. But if it's likely that they're 16 17 going to be shipped to slaughter and they 18 would become downed or condemned, then they

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In Transport Condition, we deleted

should not be shipped to slaughter, because it

"consumable" in the bedding, and changed it to

becomes a problem from the slaughter plant.

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1	"ruffages used as bedding must be certified
2	organic."
3	And we deleted the certification of
4	transporters. We'll let the Program handle
5	that.
6	And we added a sentence down in
7	Slaughter. Plants generally allow at least 20
8	minutes to two hours of rest time for animals
9	between electric prod attempts to get them up
10	if they're down due to exhausting.
11	And then in the recommendation,
12	here's where we added the terms defined. We
13	just brought them from the other document.
14	There are no changes to the definitions.
15	And then there was a lot of
16	clarification in the handling and transport.
17	And so, I will go through the adds that we
18	made.
19	Organic livestock will be
20	transported in pens with the livestock clearly
21	labeled for organic use and be contained in
22	those pens for the duration of the trip.

In Number 1, it is the responsibility of the organic producer ensure that calves have a dry navel cord and are able to stand and walk without human assistance if they are being transported to a slaughter or auction facility. The livestock trailer or shipping container and slaughter provide plant must season-appropriate ventilation to protect against cold and heat stresses.

Number 3, bedding must be provided on trailer floors and in holding pens to keep livestock clean, dry and comfortable during transportation and prior to slaughter. When ruffages are used for bedding, they must be organically produced and handled by a certified organic operation.

In Number 5, slaughter plant management shall coordinate with transporters to ensure that waiting time once the livestock trailer or shipping container arrives at the slaughter facility, is no more than one hour.

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In Number 7, slaughter plants and 1 livestock trailers, shipping containers, must 2 3 have nonslip flooring. 12, Number humane treatment 4 procedures for handling immobile and fatigued 5 animals upon arrival at the slaughter plant 6 7 are in place. Handlers may use sleds and place livestock in the bucket, but may not 8 9 push them up against a wall, gate or any object. 10 11 Number 15, euthanasia equipment 12 must be properly stored at slaughter plants and maintenance records must be available. 13 Slaughter plants all 14 must meet 15 requirements, including the Humane Slaughter Act. 16 And that was the last edit. 17 And in 18 this document, facilities are already being audited to these guidelines by the American 19 20 Meat Institute guidelines. So, any questions on the edits to 21 22 this document?

1	MR. FOSTER: I have one.
2	MS. FULWIDER: John.
3	CHAIR MIEDEMA: Go ahead, John.
4	MR. FOSTER: Thank you. A number of
5	those things you just described sound more
6	like guidance to me. And I have just enough
7	certifier left in me to be nervous about how
8	to verify some of those things and, I guess,
9	enough of an inspector in me to be very
10	worried about that.
11	So, did you address that in
12	discussion?
13	MS. FULWIDER: Well, the auditors do
14	certify to this. The meat plant inspectors.
15	So, our intention is that the
16	organic certifiers can just, you know,
17	document that these have been met by the other
18	auditors that have been in the plant.
19	MR. FOSTER: Okay. So, all of these
20	things are - all of the things you just listed
21	are already required by other agencies; is
22	that correct?
	I

1	MS. FULWIDER: Yes, these are all
2	current industry standard.
3	MR. FOSTER: Okay. So, I guess then
4	my next question is do we need to redo that?
5	MS. FULWIDER: No. No, we are not
6	requesting that it be redone. We just accept
7	the documents that are already in place, the
8	audits that have already been done, because
9	these are done on an annual basis for these
LO	plants.
11	MR. FOSTER: I'm sorry. Maybe I
12	missed something. I was trying to go over the
13	last stuff, too, but it sounded to me like
14	there was a list of things that were going to
15	be required of these operators, the
16	transportation, the handling, et cetera.
L7	It sounded to me like these were a
18	number of changes that were made to
19	expectations on operators in their
20	transportation and handling of livestock.
21	And if those things are already -
22	if those activities are already required by

1	other agencies, then why are we codifying them
2	here again, or is that not - maybe that's not
3	happening.
4	MS. FULWIDER: Just want to make
5	sure that when our organic certifier goes in,
6	they check the audit to make sure that it has
7	already happened.
8	MR. FOSTER: Thanks.
9	MR. DICKSON: Just a quick
LO	clarifying comment.
11	Many of these measures aren't
12	technically, completely regulatorily required
13	by other federal agencies, but they are
14	required by industry standards to which most
15	producers are currently verified.
L6	CHAIR MIEDEMA: Mic, please.
L7	MR. DICKSON: A lot of these
18	measures are not technically regulatorily
19	required by other agencies. But in practice,
20	they are parts of standards to which many
21	producers are verified.
22	So, these could be covered by a

1	certifier review of other audit documentation,
2	but they're not necessarily redundant with
3	other federal regulations in every case.
4	MR. STONE: So procedurally, where
5	do adjustments or changes or amendments -
6	because, frankly, I see a lot of things that
7	aren't normal practices, bedding and chickens
8	in coops and some of that, that wouldn't
9	follow with what I see in what we certify now.
10	So procedurally, what happens to
11	this document or changes from here?
12	MS. FULWIDER: Well, we were
L3	planning on doing the guidance to go with
14	that. And I know chickens in chicken cages,
15	I mean, that's a normal thing. They don't use
16	bedding. That's understood, and we don't have
L7	any language in here that requires that for
18	chickens.
19	Any more questions on these
20	documents, or discussion?
21	MR. FOSTER: Yes, I - to what extent
22	did you kind of assess the affect on the two

square foot per bird requirement, and what's 1 that going to do to folks in general? 2. 3 MS. FULWIDER: That's been through public comment several times. And there are 4 many in favor. And it is what consumers 5 expect that we have outdoor access. And most 6 7 of the organic producers are already providing at least that much. 8 9 Other discussion? MS. ELLOR: I just wanted to say 10 11 that I looked it up this morning, and Kathleen 12 Merrigan addressed this Board in November of 2007 asking us to do this work. And it's been 13 a long road and through a lot of series of 14 15 public comments. And we spent countless hours on the 16 And I know, you know, Jeff is sitting 17 18 here and he did a lot of the foundational work 19 on this issue as well. So, I really think it's a good 20 baseline and we're not saying that - and we're 21

it a minimum because we had many

calling

comments that thought we didn't go far enough, 1 2 and many comments that thought we had gone way 3 too far. MS. FULWIDER: Joe. 4 DICKSON: Yes, to play off of 5 what Tina said, you know, every single value 6 7 on that chart was the subject of, you know, hours of discussion and conversation within 8 9 this Committee. And a really important thing to note on the record about those numbers is 10 11 that they were developed with the expectation 12 that they would be part of an overall system that also included outcome-based measures of 13 animal welfare. 14 15 And that, you know, for many of us who are comfortable agreeing to those specific 16 densities knowing that, again, they were part 17 of a much more holistic system that would take 18 19 into account other measures, and we do plan to include those in our fall recommendation. 20 MS. FULWIDER: And that is correct. 21

And a space requirement does not in itself

1	equal good welfare.
2	Any other discussion?
3	(No response.)
4	CHAIR MIEDEMA: Okay. That
5	concludes the deliberations of the Livestock
6	Committee. Next up is the Handling Committee
7	and Chairman Steve DeMuri.
8	MR. DeMURI: Thank you, Tracy.
9	First of all, I just have to
10	comment I think this is my ninth NOSB meeting
11	on the Board, and a few before that. This is
12	the first one I haven't seen Grace at. So,
13	she must be out celebrating still.
14	(Laughter.)
15	MR. DeMURI: We have a number of
16	petitioned materials and Sunset materials to
17	review this week. We have three petitions for
18	attapulgite, calcium acid pyrophosphate and
19	sodium acid pyrophosphate.
20	We did have a petition to remove
21	silicon dioxide. That is still in our hands.
22	We had it on the agenda originally. And

because of the public comment we received that indicated there were some other uses of silicon dioxide that we needed to be careful of when we made a decision, that we have decided to table that one until the fall.

So, we will continue to look at those public comments, listen to the ones that we might get tomorrow, and would ask the industry for additional public comments over the next six months or so, and we'll be ready to make our recommendation on that petition to remove in the fall.

Then we go into four Sunset items for this - five, actually, for this meeting. We have enzymes and potassium iodide on 205.605(a), and nutrient vitamins and minerals, potassium iodide and tocopherols for 205.605(b), followed up by a chlorine materials annotation recommendation.

The nutrient vitamins and minerals recommendation that's on the agenda, we are going to pull that for the time being as well.

1	So, the way we hand materials on
2	the Handling Committee is that we assign a
3	lead person to each material whether it be
4	Sunset or a petition. The first one is
5	attapulgite, and John Foster had that one.
6	So, John, do you want to take us
7	through that petition, please?
8	MR. FOSTER: Sure. Thank you,
9	Steve.
10	The petition was to add attapulgite
11	as a processing aid in the handling of plant
12	and animal oils.
13	I understand it also was petitioned
14	to the Livestock Committee for another use,
15	which we did not consider.
16	We ran through the checklist as
17	described. And, Steve, I maybe should have
18	asked a little, first, how much detail do you
19	want from checklist information as we go
20	through these?
21	MR. DeMURI: I would just hit the
22	highlights and maybe explain why we decided to

1	list it, or recommend to list it or not to
2	list it, and then ask for discussion at the
3	end.
4	MR. FOSTER: Great. Thank you.
5	Attapulgite is a clay material.
6	It's mined in large part, in the southeastern
7	US. It has similar properties - similar
8	properties as bentonite on the National List.
9	It would be used as a processing
10	aid in decoloring, deodorizing or otherwise
11	filtering animal oils or fats.
12	It's a mined material. It is
13	refined using a - what the petitioner put
14	forward and the TR, I believe, confirmed was
15	a non-acid activation.
16	We determined that the impact on
17	human health and environment was - the
18	criteria was satisfied, as was the
19	essentiality availability, and the
20	compatibility and consistency.
21	We did have - so, we determined it
22	to be a non-synthetic material. And it has

some overlap with bentonite, which is already 1 on the National List, but not precise overlap. 2 3 It has some utility because of its molecular It's somewhat more functional in structure. 4 some applications. Also, as I mentioned, the 5 lack of an acid activation requirement was a 6 7 positive. Αt the end of the day, the 8 9 Committee voted. The recommendation was to attapulgite 10 add to the National List, 11 205.605(a), with the annotation allowed as a 12 processing aid in the handling of plant and animal oils, which is consistent with the 13 petition request. 14 15 The vote was five yes, one no, and That's all I have to say about 16 one absent. 17 that. Any discussion? 18 19 MS. HEINZE: So, I was the No vote. 20 So, I just thought I'd highlight for folks I voted no, because one of our criteria is 21

essentiality, and it was not clear to me from

1	the petition that we had met that criteria.
2	I've looked at the public comment.
3	I may have missed some. So, correct me. I
4	think we only had one comment on this. So,
5	I'm not sure my position has changed, but
6	certainly we have all day tomorrow for public
7	comment.
8	So, really, that would be useful
9	information, you know. We have a practice on
10	handling, or have in the past when we don't
11	have enough information, to make sure we get
12	that.
13	So, if someone has essentiality
14	information, that would be really useful in
15	making our determination on Friday.
16	MR. DeMURI: Thank you, John.
17	And I'll add by saying that we did
18	take a vote on this material prior to whether
19	we should list it or not, as to whether it was
20	synthetic or nonsynthetic.
21	And it was voted five for
22	synthetic, no - five yes - for synthetic, five

1	yes, zero no's, two absent.
2	So, we deemed it a synthetic
3	material - well, I take that back. Let me
4	backtrack. I'm looking at the wrong paper
5	here. Hang on a second. I apologize.
6	Nobody said anything. Okay. That
7	was a test. It's just the opposite, actually.
8	We voted at six for nonsynthetic, zero no, one
9	absent. So, my apologies. I was looking at
10	the next one.
11	Okay. The next petition material
12	is calcium acid pyrophosphate. And that was
13	one that I reviewed.
14	It was petitioned to the Board to
15	be added to the list 206.506(b), for use as a
16	leavening agent in baked goods.
17	So, it's calcium acid
18	pyrophosphate. It is manufactured via a
19	reaction of phosphoric acid produced from
20	phosphate rock with calcium oxide.
21	There was some discussion in the TR
22	about the possibility of some heavy metal

contamination from the mining operations that 1 were used to produce the substance. 2 3 We didn't believe that the petition provided compelling evidence that the material 4 was essential for organic production. 5 Sodium acid pyrophosphate 6 is 7 already listed for use as a leavening agent in baked goods. The premise of the petition was 8 9 that this could be an alternative for lowsodium products, possibly. 10 11 And the petitioner did make some 12 back to us after seeing our comments recommendation trying to explain that a little 13 14 more. So, I would implore the Board to 15 take a look at those comments. 16 Those are 17 really the only comments that we received from 18 anybody in reaction to in а negative 19 reaction to our recommendation. Everybody 20 else that commented, agreed with it, and that would be to not list. 21 22 There are also some other listed

1	items that can be used as a leavening agent.
2	Those would be calcium phosphates. Those are
3	already listed on the National List. So, we
4	just didn't feel like this material was
5	essential for organic production.
6	So, we took a vote. And, first,
7	for synthetic versus nonsynthetic. And the
8	vote for that was five yes for synthetic, zero
9	no and two absent. And as far as listing, the
10	vote was zero yes, five no's and two absent.
11	So, the Committee recommendation is
12	to not list calcium acid pyrophosphate to the
13	National List for use as a leavening agent.
14	Any questions at this point?
15	(No response.)
16	MR. DeMURI: Okay. As I mentioned,
17	the original agenda showed silicon dioxide was
18	going to be considered today.
19	We're not going to consider that
20	today. So, that will be postponed until the
21	fall.
22	The next item would be sodium acid

pyrophosphate or S-A-P-P. And sodium acid 1 2 pyrophosphate is already listed on the 3 National List, but it's only listed to be used as a leavening agent. The expanded petitioned 4 sequestrant on cooked and 5 use as uncooked produce. 6 7 The TR mentioned that no data was found on the material itself that indicated 8 9 that it posed any potential negative impact on health environment, 10 human and the which 11 coincided with what the previous Board had 12 found when it was listed years ago. The petitioner did not really 13 provide any compelling evidence that it was 14 15 necessary or essential for organic handling. The petitioner for this item, was 16 the same as the petitioner for the calcium 17 acid pyrophosphate that was presented a few 18 19 minutes ago. 20 As a matter of fact, I was a reviewer for this material. I contacted some 21

of the potential users of this, and I could

1	find no one in the industry that would use it
2	if it was listed.
3	So, based on that information, we
4	took a vote. We voted that it was synthetic.
5	Six yes, zero no, one absent. And as far as
6	a vote for listing, it was zero yes, six no
7	and one absent.
8	So, the Committee recommends that
9	an expanded use for sodium acid pyrophosphate
10	not be made on this petition.
11	Any questions on that one?
12	(No response.)
13	MR. DeMURI: All right. That
14	concludes the petitioned materials, those
15	three. Now, we move into some Sunset 2012
16	items. The first two are for 205.605(a)
17	listings. The first one is for enzymes.
18	Enzymes were originally listed back
19	in 1995. They've been through a couple of
20	Sunset reviews already.
21	There was really no evidence that
22	was brought forward or that we found that

anything had really changed with enzymes since they were listed and re-listed a couple of times.

There is an annotation for enzymes that was inadvertently left off of the recommendation that we posted on the website and that all of you saw. And that annotation is that they must be derived from edible, nontoxic plants, nonpathogenic fungi, or nonpathogenic bacteria. So, that's an important annotation for enzymes.

Enzymes are widely used throughout the food processing industry. There are some nonsynthetic - there are some synthetic chemicals that could be used in place of enzymes, but enzymes are an important tool for organic processors because it gives them some tools to use other than chemicals to enhance some reactions in their plants.

For instance, when an apple juice manufacturer is making clarified apple juice, enzymes is an important input as a processing

1	aid to that process to clarify apple juice, as
2	an example.
3	Many sources of enzymes, hundreds
4	of different kinds of enzymes from a variety
5	of plants and microbes.
6	And in most cases, they are
7	physically extracted. So, it's a fairly
8	simply extraction process.
9	So, the Committee took a vote on
10	re-listing enzymes on the National List on
11	205.605(a). And for those of us that were
12	there, it was a unanimous vote. Five yes,
13	zero no and two absent.
14	Any question on enzymes?
15	Let me mention also there is
16	another listing for enzymes, but it's for
17	animal enzymes. It's a separate listing.
18	This one is only for the listing on
19	205.605(a) that just says enzymes with the
20	annotation behind it. This does not include
21	the animal enzymes.
22	Okay. The next item for Sunset is

another 205.605(a) item. That's potassium 1 And Joe Dickson was the lead on that 2 3 substance. DICKSON: Just as an overall 4 clarifying comment, there are actually two 5 listings for potassium iodide. One on 605(a) 6 and one on 605(b). So, we have two separate 7 recommendations here. 8 9 On the first listing on 605(a) -and the reason for this listing is that there 10 11 are natural sources of potassium iodide that 12 can be derived from seaweeds and from brines. Although our research show that that isn't a 13 practice, it's theoretically 14 very common 15 possible. Potassium iodide is used as 16 source of iodine and table salt and in other 17 18 fortification contexts where iodine is called 19 for. 20 It was originally added to the National List in 1995. Our review of that 21 22 original Technical Review and discussion as a

1	Committee found no substantive changes to the
2	way that it is used or the information in that
3	original report.
4	We did request a Technical Report
5	last year to help us understand the nature of
6	the two separate listings. That, again, with
7	regard to the 605(a) listing, didn't reveal
8	any new information that would be material to
9	its listing here.
10	The Committee voted unanimously
11	with six in favor of re-listing potassium
12	iodide to 605(a), no votes against, and one
13	member absent.
14	MR. DeMURI: Thank you, Joe.
15	Any questions for Joe on the 605(a)
16	listing of potassium iodide?
17	(No response.)
18	MR. DeMURI: Okay. Very good.
19	We'll move into 205.605(b) Sunset materials.
20	The first one is nutrient vitamins and
21	nutrient minerals.
22	You've all heard the iterations

1	that this has gone through the last month or
2	so. We had it on the list - on the agenda.
3	We took it off because of public comment
4	received.
5	We got word from the Program that
6	that was going to be an issue from a timing
7	perspective with the Sunset process. So, we
8	put it back on for this meeting.
9	So, I apologize to everybody who
10	had to make flight arrangements and comments,
11	and there was a lot of confusion around that.
12	So, we on the Committee apologize
13	for that, but we feel like it's the right
14	thing to do right now to consider this for re-
15	listing. And then come back in the fall with
16	probably a different take on it.
17	So, Tracy, you handled this one for
18	us as the lead person. So, Tracy, I'll hand
19	over the discussion to you.
20	CHAIR MIEDEMA: Thank you, Steve.
21	And Vice-Chair Joe Dickson, I'll hand the
22	gavel over to you.

Thanks for the synopsis, Steve, of 1 this winding path that nutrient vitamins and 2. 3 minerals has been on. little bit To go back just 4 а 5 further on the recap, at the April meeting we first presented the 605(b) item for 6 7 re-listing. And we recommended the re-listing of the material as is. 8 9 And at that meeting, the Program requested that we reconsider/reevaluate our 10 11 recommendation essentially to pull it, and we 12 did. We were also advised that day from 13 Miles - from - sorry - Miles McEvoy, our 14 deputy administrator, he said this is a big 15 16 This is going to take a lot of your deal. 17 time to take a look at this. It may even 18 require additional meetings to take a look at 19 this. There's a lot of products that include 20 substances beyond what is on 104.20. So, we really did go into this 21 22 journey, if you will, with the expectation

that we had several meetings to work on it. 1 We have been proceeding along 2 gathering public comment, and we have - this 3 Board has never received more public comment 4 on a single material or issue than it did in 5 advance of this meeting on this one issue. 6 7 So many that we, as a Board, just received the summary of the comments yesterday 8 9 morning. So needless to say, we have not 10 11 digested your comments, and we absolutely must 12 as part of this process of doing the right thing by you all and by the material. 13 However, we were implored yesterday 14 15 in an extraordinary comment for, I think, four 16 minutes bу our Deputy Secretary of 17 Agriculture, that this we must vote meeting. 18 So, vote we must. Vote we will. 19 20 And now, the question becomes vote on what? We were asked by the Program, not 21 22 vote on the material with the current

annotation. We proposed an annotation that 1 has had a very mixed bag of responses, like I 2. 3 said. that we have not even began to incorporate into our thinking. 4 And we have been assured by the 5 Program, that business as usual will proceed 6 7 so long as we vote at this meeting. I think it sounds very important 8 9 that there's lot of hesitancy а and nervousness out there in the industry that we 10 11 could really flub up essential vitamins and 12 minerals if we don't vote at this meeting. So, in playing through the scenario 13 that the NOP proposed, this material would get 14 bundled on the Sunset docket for 2012 with, I 15 believe it was - was it over 200 materials? 16 17 And it would start writing off into the 212? 18 land or rulemaking. 19 And comments would begin to - I 20 rulemaking would be promulgated. quess Comments would be coming in. 21 22 As a compromise, what I have spoken

with, at this point, five of my fellow 1 committee members about -- is a compromise. 2 3 You all are seeing this happen in very much realtime. You saw the information 4 from the Deputy Secretary yesterday at the 5 same, exact time we did. 6 So, we are - we're working this out 7 in realtime. And what we do not want to get 8 9 in a -- find ourselves in a situation is that next fall we come back with the annotation 10 11 that makes sense based on the feedback we 12 receive from you all, and we have dueling annotations out there. One that we have 13 recommended at this meeting, and one that we 14 recommend at the next meeting, that are both 15 out there soliciting public comment. 16 17 compromise, So, а Ι as 18 suggesting, and five of us of seven of us have 19 agreed that a sound course would be to re-list 20 the material with no annotation at this 21 meeting.

It's a placeholder, it's clean, it

doesn't change anything because the CFR stands as it is until October 21st. And the Program has assured us that we have plenty of time to create the annotation that makes the most sense.

So in this way, we protect business as usual the Deputy Secretary Merrigan has said we needed to do, we keep our placeholder - Katrina, I know you've referenced a need for that placeholder - we honor the intent and the spirit of what the NOP first sent us on this which is we've got a flawed journey, annotation and we don't, as a committee, plant a flag by recommending a flawed annotation, and we're able to take a measured, prudent approach, read all 3,000 or so pages, digest that and come back with an annotation in the fall that makes the most sense.

MR. DeMURI: Thank you, Tracy.

So, to follow up on that as a Committee, we have to meet again to put that recommendation on paper. We'll have that for

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1	you on Friday with a vote, but Tracy did a
2	good job of explaining to you what we're
3	thinking right now.
4	So, if anybody has any questions,
5	we'll entertain those at this point.
6	Nick.
7	MR. MARAVELL: Yes, I was just
8	wondering did we get a reaction out of the
9	Program on this, Tracy?
10	CHAIR MIEDEMA: It has not been
11	solicited. We have heard from the Program
12	quite a bit over the last few weeks. So, at
13	some point we will have to, on our own as a
14	Committee, pick a lane.
15	MR. MARAVELL: I'm just - I just
16	would like to know can I solicit that as a -
17	I just want to know what the Program's
18	reaction is just so that, you know, I get an
19	idea how this is going to play out because
20	supposedly we're doing this to meet the
21	requirements of the Program, correct?
22	CHAIR MIEDEMA: We're voting at this

1	meeting to meet the requirements of the
2	Program.
3	MR. MARAVELL: The timing
4	requirements is what I'm talking about, yes.
5	I wasn't talking about substance. I was just
6	talking about the timing requirements, yes.
7	So, I would like to get a reaction
8	from the Program if that's okay.
9	MR. McEVOY: Yes, this is a
10	complicated issue. We did bring this - you
11	did have a recommendation in April of 2010 to
12	re-list nutrient vitamins and minerals. We
13	provided some new information and asked you to
14	withdraw that, and to re-look at that to see
15	if there was some other way to go.
16	We were expecting to get
17	information, clarification information from
18	FDA in a more timely fashion. That has only
19	been provided very recently. So, the timing
20	has been very problematical throughout this
21	process and we need to move forward with a

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Sunset 2012 proposed rule.

In order to not disrupt the trade, 1 2. need you to make a determination on 3 nutrient vitamins and minerals this meeting. And that in terms of the proposal to 4 re-list without the adaptation, I think that 5 sounds like a reasonable way to proceed 6 7 recognizing - it kind of recognizes that there is a problem with the current annotation. 8 9 You have a lot of public comment to get through. Gives you the time to then 10 11 review that during the summer and come back to 12 this issue in the fall that - but also gives the Program the information that we need to 13 continue to move forward with what needs to be 14 done so that this can move forward in a more 15 orderly fashion. 16 17 So, sounds good to us. MR. DeMURI: Thank you, Miles. 18 19 Any other questions? 20 Jay. MR. FELDMAN: To clarify, is this no 21 22 annotation, or no annotation change?

1	MR. DeMURI: We would drop the
2	current annotation that is on the listing as
3	it presently stands.
4	Joe.
5	MR. DICKSON: Just for the clarity
6	of the record, would you or Tracy just read
7	what that listing would say without the
8	annotation?
9	CHAIR MIEDEMA: It would be
LO	annotation change in that the striking of the
11	annotation would be in and of itself a change.
12	So, it would simply read "nutrient
L3	vitamins and minerals."
14	MR. DICKSON: Katrina.
L5	MS. HEINZE: Certainly this is
16	something we should handle in handling, but I
L7	thought we were re-listing as is. So, that's
18	okay. I'm just confused, but maybe we could
19	talk about it when we finalize our
20	recommendation.
21	MR. DeMURI: We'll talk about it
22	some more, but it was kind of an ad hoc

1	committee meeting that we did - not a
2	committee meeting, but a poll, we should say.
3	So, we will talk about it in
4	committee. That's just one of the options.
5	Jay.
6	MR. FELDMAN: I think that would
7	constitute an expansion of use which we can't
8	do under Sunset, I believe.
9	MS. HEINZE: Give the Committee a
10	chance to talk about it.
11	MR. DeMURI: Good point, and we'll
12	take that into consideration. Thank you.
13	CHAIR MIEDEMA: Yes, the thinking
14	was that this is a clarification based on the
15	Program asking us for clarification.
16	So, the big picture here is, I
17	guess, laddering us to the fall and an
18	annotation that makes sense, and not setting
19	us up for dueling annotations that are out
20	there both soliciting public comment.
21	MR. DeMURI: I wouldn't mind getting
22	the Program's input on that on Jay's comment,

1	if you guys would care to comment at this
2	point.
3	MR. McEVOY: Yes, that's something
4	that we need to look at of whether or not it
5	would be an expansion of the list or not.
6	Give us a little bit of time to
7	think that through and get back to you on
8	that.
9	MR. DeMURI: Okay. We'll give you
10	24 hours.
11	(Laughter.)
L2	MR. DeMURI: Any other questions on
L3	Sunset of nutrient vitamins and nutrient
14	minerals?
15	Okay. Thank you, Tracy.
16	The next Sunset is another
L7	205.605(b) item and it's again, potassium
18	iodide. Joe Dickson.
19	MR. DICKSON: Thank you. So, this
20	is the other listing for potassium iodide.
21	This is the listing on 605(b) that sort of
22	raised a red flag and caused us to ask the

1 question last year why are there two listings and, you know, let's dig a little deeper. 2 3 The listing on 605(b) is essentially redundant because potassium iodide 4 being the primary form of iodide used for 5 supplementation as iodine, is already covered 6 7 under the listing for nutrient vitamins and minerals with or without the annotation. 8 9 So, this listing which lists it separately and restricts its use to made with 10 11 organic products for the synthetic form of 12 potassium iodide, seemed to the Committee to completely redundant 13 as it's alreadv allowed under another listing. 14 15 So, in the interest of the tidiness of the list and this sort of discrepancy, we 16 voted to remove it or allow it to Sunset off 17 18 of 205.605(b) -- I'm sorry. We voted to re-19 list it under our procedures, and the vote was 20 zero in favor of re-listing, six not in favor of re-listing, with one person absent. 21

Any questions on that?

1	Katrina.
2	MS. HEINZE: As I was looking
3	through public comment, we received one public
4	comment expressing concern that iodide is an
5	important sanitizer. And I don't know which
6	listing that has to be under.
7	And I was wondering - I don't - I
8	just don't remember talking about that in
9	Committee. So, I don't know which listing we
10	need to keep that.
11	MR. DICKSON: I'd like us to review
12	that comment and add that to our Handling
13	discussion.
14	CHAIR MIEDEMA: Any more questions?
15	(No response.)
16	MR. DeMURI: Okay. Hearing none,
17	we'll go to the next item. Another Sunset for
18	205.605(b) is tocopherols.
19	These were originally listed back
20	in '95. They've been through a couple of
21	Sunset reviews now. This is the third one.
22	And we have identified on

additional or new information that wasn't 1 brought forth in those previous reviews. 2 3 Tocopherols has an annotation which is derived from vegetable oil when rosemary 4 extracts are not a suitable alternative. 5 used 6 Tocopherols are 7 antioxidant, as is rosemary extracts. rosemary extracts just aren't sometimes 8 suitable for certain uses. And also, rosemary 9 10 extracts are not all that easy to find at 11 times either. 12 So, tocopherols were put on the list as an alternative when the rosemary 13 extracts were not a suitable, viable option. 14 15 They're made through a vacuum distillation of edible vegetable oil products 16 used as a source of Vitamin E at times, and 17 also as an antioxidant and a pretty wide range 18 19 of processed organic products. 20 So, the Committee took a vote on re-listing this material and it did pass, five 21 22 yes, zero no, and two absent, to re-list on

1	205.605(b).
2	Any questions?
3	(No response.)
4	MR. DeMURI: Okay. Thank you.
5	The next agenda item is a
6	recommendation on nutrient vitamins and
7	minerals. We obviously have pulled that one
8	for the time being. We'll come back in the
9	fall with something on that probably tied up
10	with the Sunset process.
11	The next item on the agenda that we
12	will discuss is chlorine materials annotation
13	recommendation. And John Foster will handle
14	that one for us.
15	MR. FOSTER: Thank you, Steve.
16	After all the chlorine discussions, I'm
17	feeling quite sanitized, actually.
18	(Laughter.)
19	MR. FOSTER: So, in a nutshell, this
20	is just a standard review, again, and similar
21	to crops.
22	The general direction was to try

and align the annotation more closely with the NOP's draft guidance that came out fall or winter, I believe, to read - this is actually a fairly long annotation.

I don't believe it's any more restrictive. It is - it will have the same net effect, or at least that as the intent. It will be more of a codification of what's already present in the industry.

And a lot of operators have been looking for some regulatory support wherein it's been - that support has been somewhat fluid since the start of the NOP.

So, the annotation recommends the following: Chlorine materials, open parentheses, calcium hypochlorite, chlorine dioxide sodium hypochlorite, and parentheses, may be used up to maximum labeled rates for disinfecting and sanitizing food contact surfaces. Chlorine materials in water or food contact is in direct crop used permitted at levels approved by FDA or EPA for

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such purpose provided the use is followed by rinse with potable water that does not exceed the maximum residual disinfectant limit for the chlorine material under the Safe Drinking Water Act. Chlorine in water used as an ingredient in organic food handling should not exceed the maximum residual disinfectant limit for the chlorine material under the Safe Drinking Water Act.

The vote on this was six yes, and zero no, and one absent. I would also say that we got some very good public comment that spoke to perhaps a revision to the second paragraph in there that instead of requiring the language of a rinse to speak to an intervening act to accommodate other means of clearing out processing equipment other than water rinse, which is appropriate.

And I suspect in our Handling Committee meeting, we will bring that up, as well as, Nick, the use of the word "should" again is replicated there. I suspect we will

2.

1	handle it the same way as the Crops Committee
2	would.
3	That's it in a nutshell.
4	MR. DeMURI: Thank you, John.
5	Anybody have any questions for John
6	or the Committee?
7	Jay.
8	MR. FELDMAN: John, you said this
9	policy brings us into conformance with the NOP
10	guidance, right?
11	And so can we hear from the Program
12	that it does that?
13	MR. FOSTER: I believe it's draft
14	guidance at this point and I - it's fine with
15	me to hear from the Program.
16	MR. McEVOY: Yes, we published draft
17	guidance last October on the use of chlorine
18	in organic production and handling. And the
19	final guidance will be out relatively shortly
20	that will reflect the draft guidance and
21	incorporate the comments that we received on
22	the draft guidance.

1	(Laughter.)
2	MR. McEVOY: What was the question?
3	MR. FOSTER: I think we just wanted
4	to hear from the Program. So, I - you done
5	good, I think.
6	MR. FELDMAN: So, Miles, does this
7	language, does it conform with -
8	MR. McEVOY: Yes, it does.
9	MR. FELDMAN: Thank you.
10	MR. DeMURI: Any other questions?
11	Katrina.
12	MS. HEINZE: Okay. I have to
13	apologize before I say this. I had public
14	comments mixed up in my head. So, this was a
15	more appropriate comment during Crops.
16	But in some of our written public
17	comment, we got some comments that supported
18	these changes to annotations for pouring, but
19	wanted corps being changed to match handling.
20	I thought it was handling being changed to
21	match crops.
22	So, totally my mistake, but could

1	you give us a background on why they're
2	different and what needs to match what or why
3	they don't have to match?
4	MR. FOSTER: Yes, but I need to ask
5	you what you mean by "they." Why they are
6	different between crops and handling or
7	between the old versions of crops versus new
8	of crops, old of handling, new of handling?
9	Sorry. I -
LO	(Laughter.)
11	MS. HEINZE: The two proposed new
12	annotations matching, are not matching.
13	MR. FOSTER: Yes, I can do that.
14	The context in which chlorine might be used as
15	a sanitizer is a little bit different. And
16	that the context in which chlorine in water
L7	would be used on 601, it is very different.
18	So, there's that reason.
19	The other underlying assumption
20	here, the reason they're not closer is that
21	the, as I mentioned in the Crops section this
22	morning, the operating assumption and this

1	could very well have been just my operating
2	assumption. So, if it's wrong, I'll shoulder
3	that - is that post-harvest water use on a
4	farm would be using the chlorine annotation
5	from 605 because of its post-harvest utility.
6	So, it wouldn't need to be the same
7	if that caveat is in play. Does that make
8	sense?
9	MR. DeMURI: Any other questions on
10	the chlorine materials annotation
11	recommendation the Committee is making?
12	(No response.)
13	MR. DeMURI: Okay. That concludes
14	our presentations. We're back on schedule.
15	CHAIR MIEDEMA: Well done, Chairman
16	Steve DeMuri of the Handling Committee.
17	I think we have time to forge ahead
18	and let's move on next to Materials Committee
19	and Chairwoman Katrina Heinze. Thank you.
20	MS. HEINZE: I'd be happy to forge
21	ahead, but we're probably going to take all 45
22	minutes. So, do you want to forge ahead, or

1	do you want to give people a break since the
2	break is scheduled in the middle of that 45
3	minutes?
4	CHAIR MIEDEMA: I hear the whispered
5	word "break."
6	(Laughter.)
7	CHAIR MIEDEMA: So, we'll break.
8	Let's really try to be back and seated in 15
9	minutes. That gets us at 32 minutes after the
10	hour.
11	(Whereupon, the proceedings went
12	off the record at 2:18 p.m. and resumed at
13	2:36 p.m.)
14	CHAIR MIEDEMA: We're back in
15	session. We have quorum. Next up is the
16	presentation and deliberations of the
17	Materials Committee. Chairwoman Katrina
18	Heinze, please proceed.
19	MS. HEINZE: Thank you very much,
20	Tracy.
21	Lisa is going to bring up a
22	presentation I have, and I would be happy to

provide this to Board members. I should have 1 thought of that ahead of time and e-mailed it 2 3 to you guys, but I wasn't that smart. We have 45 minutes for this topic. 4 I am very grateful to livestock and handling 5 for getting caught up, because I think we're 6 7 going to use it. So, my plan is I'm going to do an 8 9 overview of kind of the history on the topic, our grounding recommendation, and then I'll 10 11 discuss the specific document up for review at 12 this meeting. And the reason for that is this is 13 a really, really complicated topic that has a 14 15 ton of history. And I know when I was new on the Board and I was asked to work on this, my 16 head spun for about two years. 17 18 So, I want to make sure that I help 19 those of you who are new, to get a little bit 20 grounded. before 21 So, Ι qet the to 22 presentation, at our fall meeting, we said -

or I said that I had hoped that the Materials 1 2 Committee bluow have worksheets on 3 classification ready for this meeting. Despite a lot of effort by the 4 Materials Committee and a lot of discussion, 5 we were not able to do so. So, I apologize. 6 7 I know that the public has been very anxious for those worksheets, and I am 8 9 committed to continuing our work and really do hope that we will have something by the fall. 10 11 And I know the Committee is very committed to 12 that. There were several topics that were 13 sticking points, but really the big sticking 14 15 point was how to approach determining if a 16 significant level of а synthetic input 17 remained in the material being reviewed for 18 classification. 19 And that sticking point took all of 20 our discussion time. So, really we ran out of time. 21 22 But the good news is, is after all

1 that discussion, we were able to reach proposed guidance on that topic. And that's 2 3 what we're presenting today. So, classification has been a 4 perennial topic for the organic movement and 5 this Board and has varying perspectives. 6 7 You're going to hear me say this a number of times, but all perspectives are very 8 9 valid. You can go - I'm still on Page 1. 10 11 So, I am very grateful for the folks on the 12 Materials Committee for continued your engagement and being willing to bring those 13 different perspectives to the table while we 14 have this discussion. We have had vigorous, 15 16 but very gracious debates, and I appreciate 17 that. 18 Okay. So, classification of There is a lot of detail on all 19 materials. 20 the specific history in the November 2009 recommendation. But the crux of it is that as 21

an organic group, we agree on classification

for the bulk of all materials. 1 There's a small number, our current 2 3 poster child is corn steep liquor, but there have been others over even my brief time on 4 Board, where we could not get to 5 the agreement. And so, the public has asked the 6 7 NOSB to provide greater clarity. There have been years of efforts 8 9 kind of starting in 2005, moving through 2006, going on and on and culminating in the 10 11 November 2009 recommendation. 12 So, next slide. So, I think Okay. that captures it, but - so, this presentation 13 is really highlights. It's not every slide, 14 but it's highlights from the presentation I 15 did in November 2009. 16 17 reason we're doing So, the 18 classification is because it really matters, 19 right? 20 It tells us whether things are 21 allowed prohibited in various or our 22 production and handling and because of these

inconsistencies. 1 slide. So, some thought 2 Next 3 You've heard me say this before. All perspectives are valid and there's 4 decision on classification that's going 5 keep it - have everyone's agreement. 6 7 there hasn't been since time immemorial. Our job on the Board is to make the 8 really tough decision and move 9 forward, because our public has asked us to do that. 10 11 That was true in November 12 after two years of industry and stakeholder debate, and it is true today. 13 So, this is the Okay. Next slide. 14 15 slide I showed that November. This is really to highlight the work of the Material Working 16 17 Group. So, I think in 2007, the Materials 18 19 Committee had proposed a recommendation on 20 classification. It was wrong. The public told us it was wrong and we needed help. 21 22 And so Kim Dietz and Gwendolyn Ward

1	came together. They pulled together a broad
2	group of stakeholders. And for a year and a
3	half, those folks met every week and they
4	debated, and they debated, and they debated
5	and they brought examples and they went
6	through examples, and they came up with
7	recommendations that we could base our work
8	on.
9	So, all our work has been done
10	based on that group and they will deserve
11	thanks for many years for their commitment to
12	that.
13	Okay. Next slide. Okay. So, what
14	we recommended. The meat of the matter.
15	Okay. Next slide. So, we had
16	three guiding principles, and thank you, Jay,
17	for going through those. I will just
18	highlight them again. Source and process both
19	count. Because of that, the same material can
20	be classified as apicultural non-synthetic or
21	synthetic, depending on source and process.
22	So, there are examples in the

November 2009 document that show a certain 1 material, call it Material A, that is both 2 3 synthetic and non-synthetic. Our example today was potassium iodide, right, where it 4 can be both. 5 And then finally if a material is 6 7 processed such that it is classified as a synthetic, then the material is synthetic 8 9 regardless of source. And this really had to do with agriculturally-sourced materials that 10 11 had been processed to the point where they 12 were synthetic. And there had been quite a bit of 13 about, well, discussion should 14 15 apicultural synthetics or what did that mean? 16 So, this was the Board saying, no, they're 17 synthetic. 18 Okay. Next slide. So, and this is 19 a really important slide. So, I'm going to 20 spend some time on it. We considered two perspectives in 21

You'll see that mirrored by

November 2009.

1	the recommendation that we have today.
2	So, partly for consistency and
3	partly because this is a topic that you could
4	spend a lot of time on, I am just going to
5	read exactly what I said in the transcript
6	from November 2009.
7	So, in preparing for this, I just
8	went and copied and pasted what I said, on
9	this slide. And I'm doing that because I
10	don't want folks to think that we haven't had
11	these conversations and that both of these
12	perspectives have not been perennial
13	perspectives.
14	So, here we are a year and a half
15	later. We still have these, you know, these
16	just different ways of looking at what we do.
17	I'm also reading from it because
18	this is a complicated topic and - anyway, I'm
19	going to read.
20	"Okay. So, let me explain our
21	rationales." I'm explaining the majority
22	recommendation, which is the information on

1 the left side - before I do that, let me 2 explain what it is. 3 So, the recommendation was if used as synthetic in a process, but there is no 4 chemical change and the synthetic is not 5 present in the final material at a significant 6 7 level - so, remember that. That's why we're here having this conversation - then the 8 9 resulting material is not synthetic. That recommendation maintains what 10 11 has been the current practice in the industry, 12 the majority felt it was least disruptive, and it was consistent with the Material Working 13 Group recommendation. 14 15 The other perspective is that use of a synthetic not on the National List of 16 17 approved synthetics automatically results in 18 the material being classified as synthetic. 19 So, now let me read. "So, let me 20 explain the Committee's rationale a little bit. 21 22 We went with this recommendation

1 for several reasons. One, it's the closely aliqued 2 recommendation most 3 what's been happening in the industry today, and has been pretty much since the beginning. 4 If you look back at early Boards, 5 this is they made decisions about 6 how 7 synthetic or non-synthetic starting around very consistent with how 8 1995, and is 9 decisions had been made in the industry. It maintains a status quo. So, 10 11 it's the least destructive to the list, both 12 to the list and to the practices. Because if you'll remember, most classification decisions 13 are not made by the NOSB and they don't show 14 15 up on the list. They happen every day in 16 crops and livestock. 17 When someone is looking at whether a material is nonsynthetic and can be used in 18 19 crops or livestock, this recommendation 20 matches what's been happening in those decisions. 21

But we - okay. But we do have a

minority opinion, and I want to highlight it 1 because it reflects a lot of discussion that 2 3 happened at the Material Working Group, and a discussion that happened lot of 4 Committee. And I want to make sure the Board 5 has time to discuss it as well. 6 7 The minority opinion is that if a synthetic is used, then the material should be 8 9 classified as synthetic, period. And, really, the argument for this is transparency. 10 11 The minority opinion approach to 12 classification is black and white. It's very clear to consumers. 13 We are not going to have a lot of 14 15 disagreement if you go with that minority 16 opinion, but it has a really significant 17 impact. 18 There would be a lot of materials that would be reclassified that are in use 19 20 today in crops and livestock, and it would be reclassified from nonsynthetic to synthetic. 21

So, at the end of the day while

something this clear is very attractive, the majority of the Committee at the time, and subsequently the Board, did not feel that the minority opinion was practical and it would reverse years of practice in our industry.

Okay. So, that's what I said in November 2009. So, we had a lot of discussion on the Board at that time.

I would strongly encourage folks, especially folks who weren't there during those discussions, go back and read the transcripts. Each of you will individually have a connection to either the recommendation or the minority opinion. And you need to understand that, and you need to understand the debate to inform your opinion.

So, after all that, the vote for the final recommendation in the - at the time, it was a joint Handling/Material Committee committee - was five yes, one no, one abstained, one absent. And then this recommendation passed the full Board with 12

yes, one no, and two absent.

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So, I gave you a friendly nudge to read the transcripts. And I would - next slide. Okay. So, that recommendation came with a number of definitions. Can't see it real good on this slide, but the ones in bold italicized are recommended additions to the definitions in the final rule. So, take a look at those.

Next slide. And then we had some discussion about what this means in the real world. So, what it means is that extraction with a synthetic not on the National List -material's classified doesn't mean а synthetic unless there's chemical change or the synthetic remains in the final material at a significant level. We'll be back to talk about that. Extraction was broadly defined to include mechanical physical separation in addition to solvent extraction, chemical change - so, if chemical change happens, it would not necessarily include - oh, sorry.

Chemical change would not necessarily include processes like ion exchange or pH adjustment if the final material is not a different substance from the initial substance, and significant levels should be determined with reference to the applicable regulatory limits in addition to technical and functional affects. So, that's what we were looking at, at the time, for significant.

Next slide. And then we talked about formulated products. So, for example, a vitamin for livestock - I'm making this up. Remember, I'm not a crops or livestock person. A vitamin for livestock that had some flow agent in it, if that flow agent is a synthetic, it's obviously there at а significant level -- that makes the resulting combo synthetic, is kind of what this slide means.

Okay. Next. So, some other things just for the new folks who weren't there, that you should know that were in the

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recommendation. They're not material for 1 The recommendation also includes 2 todav. 3 discussion of agricultural and nonagricultural. So, in the fall when we're 4 back to talk about our worksheets, this is 5 going to be important. 6 7 Next slide. There was also quite a bit of discussion of products of naturally-8 9 occurring biological processes. At the time, the material of interest was yeast and where 10 11 did it belong and could we make it 12 commercially - require commercial availability. The recommendation really kind 13 of defers discussion of these because they're 14 15 so complicated. Okay. Next slide. And then we had 16 NOSB practices 17 that we recommended. some Specifically, two votes on materials. So, 18 19 that's where the voting for classification and 20 then voting for allowance came up. And then reminding the Board to say 21 22 we might need to use better annotations for

some of these to really focus on source and process.

And then reminding the Board that we really had to get technical and really dig into these materials, because sometimes this is really complicated.

Next slide. And then I Okay. reviewed -- we had received guite a bit of public comment at that meeting. So, I had a through all slide that went the public comment. There was general support. There was a concern about scope. I highlight that because this question of what about a material that is 95 percent organic agricultural inputs and has five percent things on 605? synthetic or is it nonsynthetic? How does that happen? This question led to our April 2010 addendum, which I'm also - is up for vote today.

Okay. Next slide. And then we had some next steps. The key one here was the guidance document, which is these worksheets,

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1 which we're still trying to get to a year and 2 a half later. 3 Okay. Next slide. Okay. So, thank you for indulging me in that history. 4 5 Please, please, please read that qo recommendation. I know it's 18 pages. 6 I know 7 it's a long read. For those of you who this is your first meeting, you're going to need it 8 9 for the next five years. So, it's a worthwhile investment. 10 11 So, turning to this meeting's 12 proposals, because I know that - I've been working on this for a long time. 13 I'm sure it's much more interesting for me than it is 14 for you. We have two voting items for our 15 Lisa, if you can go down to the 16 meeting. 17 proposed - the proposed action? 18 remember the So, 95 percent 19 agricultural - organic agricultural inputs and 20 the five percent - it's Page 1, Lisa. That was a topic of great discomfort, I would say, 21 22 in the public comment in November 2009.

So, the Committee went back and proposed an addendum to the definition of chemical change. So, you can see it in the recommendation. November 2009, chemical change was one sentence: an occurrence whereby the identity of a substance is modified such that the resulting substance possesses a different distinct identity. And then says, see related definition of "substance."

To try to address this 95 percent product, the Committee recommended a second sentence which I'm not going to read. There was a lot of discussion at that meeting. At the time, our counsel from NOP, it was right when Miles was coming, our counsel had been that everything we did on classification had to go into the final rule. So, this idea of having guidance and working on it hadn't really come into being.

So, after - oh. So, after April 2010 where this second sentence passed, 12 yes, two no, one absent, the Program came back

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and said, we don't like that. So, did a bunch 1 2. of the public. 3 So, the Committee has gone back and what we're proposing for this meeting, is that 4 we rescind the second sentence. 5 We think we overstepped. We think 6 7 we can handle it in quidance. We are much happier with that approach. I think that's 8 9 the feedback we've gotten from the Program. So, we want to pull it back. We need to do 10 11 that, because it proposed was а 12 recommendation. So, we want to send a clear signal 13 to the Program that we overstepped, we think 14 15 we can handle this 95 percent through Okay. So, that's the first thing 16 quidance. we're going to vote on. 17 18 Then if - I don't think you have to 19 pull it up. Okay. Then the second thing 20 we're voting on is proposed guidance really to address this idea of what is a significant 21

amount or level of synthetic input remaining

in a material to be classified. So, you saw when I went through it, that word "significant" comes up a lot.

We have - we looked at two approaches. We talked about them for a long time. And these perspectives really mirror the minority and majority perspectives that were the subject of so much discussion at the November 2009 meeting.

One approach that we considered -this is a minority approach -- but one
approach we considered would evaluate any
known level of a synthetic substance in the
final material or in the environment as a
result of the substance's manufacture, use and
disposal as significant or as a significant
level.

Proponents of this approach suggest that consumer trust is paramount. So, it gets back to the transparency. And we need assurance that organically labeled products meet a consistent standard in compliance with

the statutory standard on synthetic agents and 1 their allowance. 2 3 They go on to say that standard of review really requires that we look at harm of 4 substance, regardless 5 synthetic of level. 6 7 under this approach, all So, synthetic inputs residues have to be 8 or 9 examined. So, that is very consistent with the original minority opinion. 10 11 The second approach we considered, 12 and which ultimately is the recommendation you'll be voting on, is that a 13 that significant level of a synthetic substance in 14 the final material means a level exceeding any 15 applicable regulatory limits, where in effect 16 for the material being classified, and a level 17 18 without any technical and functional effects in the final material. 19 20 So, this is an evolution of the Material Working 21 Group recommendation. 22 Proponents of this approach believe that it's more consistent with past NOSB practice and precedent, is consistent with the Material Working Group recommendation and really reflects the bulk of public comment we've gotten over the years on this topic.

Additionally, the majority of the Materials Committee was really concerned with using an approach of any known level, knowing that technology allows any known level to change smaller and smaller over time.

We did have discussion that any applicable regulatory limits, that a certain material may or may not have them. And so in quidance would be that case, our technical and functional effects any remaining synthetic would need to be evaluated.

Okay. So, as a final thought, this guidance is intended to apply only in cases where a synthetic input is removed from the final material with the intention of fully removing the synthetic input, but where

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complete removal is not possible. 1 So, this doesn't mean we added a 2 3 synthetic and it's going to stick around and so then you look at regulatory limit. 4 really a case where it's intended not to be 5 there, but, you know, the reality is you can 6 7 always measure something at some level. this is, for example, 8 So, 9 extraction of a natural with a synthetic solvent. 10 11 The Committee voted for the second 12 approach as proposed quidance with a vote of four yes, two no. 13 We have received public comment on 14 15 both of these voting items on the -- pulling back the second sentence of chemical change, 16 that passed the Committee, six yes, zero no. 17 18 All public comment supported it. 19 For this proposed quidance on the 20 significant level approach, we had a number of public comment with the minority opinion 21

by a number of comments from

supported

consumer groups and consumer comments. 1 the majority supported by several certifiers 2 3 and folks who were really concerned with the disruption that would come from going with the 4 minority opinion. 5 So, finally, one last thought, and 6 7 then you can ask questions and debate and We wanted to provide an update. 8 whatever. 9 the midst of all this, we had a discussion about classification 10 versus 11 allowed. 12 So, just reminder that а 13 classification is a separate process allowed or prohibited. All right. So, just 14 15 -- this is really a critical distinction. So, a material manufactured with a synthetic may 16 be classified as nonsynthetic. However, we 17 have a further obligation to determine whether 18 19 that material is consistent with organic 20 practices. the review for 21 So, in 22 classification that a committee should

1	determine oh, they may determine that a
2	material is nonsynthetic, but it should be
3	prohibited, and we have an obligation to act
4	on that.
5	So, that is the Committee's
6	recommendations. So, one is just a reminder,
7	and then we have the two voting items; one to
8	rescind chemical change, and the proposed
9	guidance on an approach to significant level.
10	What I would suggest is that we
11	handle chemical change first, and then move to
12	the approach to significant level.
13	So, any questions on chemical
14	change?
15	(No response.)
16	MS. HEINZE: Okay. It doesn't look
17	like we have any. So, moving on to the
18	approach for - approach to significant level,
19	any questions or discussion on that?
20	Yes, Nick.
21	MR. MARAVELL: Yes, this is just to
22	show my ignorance, because this is going to be

1	with me for quite a while, my ignorance.
2	In a level without any technical
3	and functional effects in the final material.
4	I know what functional effects are. I don't
5	know what technical effects are, and are you
6	suggesting that those two need to be met, both
7	technical and functional effects?
8	So, just explain it to me. I
9	really don't know.
10	MS. HEINZE: Okay. I'm going to
11	try.
12	So, a functional effect might be
13	where it has an effect in right. So, like
14	a pesticide.
15	A technical effect might be where
16	it's there to as a flow agent or a sticking
17	agent or something like that.
18	And, yes, both need to be met. And
19	I'm really glad you asked the question. So,
20	thank you.
21	MR. MARAVELL: Okay. In my mind,
22	they both those both sound like functional

1	effects. So, what I'm wondering is what does
2	technical add to it?
3	You had something else in mind, and
4	I'm just trying to find out what it is.
5	MS. HEINZE: No, I'm really glad.
6	Ask that you're right. You're going to
7	live with this for a long time.
8	We included both. And really when
9	I say "we," the Material Working Group
10	included both because they wanted to cover
11	both of those in case someone chose not to
12	interpret functional as including technical.
13	So, it was to make sure that both
14	were included, right. Because as you all
15	know, we can all choose what a word means, and
16	so they wanted to cover both bases.
17	Other points?
18	Yes, Colehour.
19	MR. BONDERA: I'm going to have a
20	hard time with this question partly because I
21	don't have your presentation to verbalize it
22	correctly.

So, I'm wondering if you can go 1 back to about the third one. 2 I'm not sure. 3 I'll call you when you go, because I want to read something from there as my question. 4 If that's the third one, it's not 5 it, it's the one with two side-by-side - is it 6 7 that one? I think - that is the one I have a question on. 8 9 And where it says "our recommendation, " so I'll just read it from 10 11 here to ask my question. 12 It says, if the use of a synthetic in a process did not lead to chemical change 13 -- and I am a teeny bit concerned about the 14 word "chemical" there, but that's not my 15 question -- and -- and that word is - and the 16 17 in the synthetic was not present 18 material at significant levels, then 19 resulting material was not synthetic. 20 My question is -- and maybe you just need to help me with a little bit of 21 22 English grammatical details and then it will

1	be clear.
2	Both of those things have to be
3	true for the conclusion, is that correct?
4	So, it's not that it did not lead
5	to chemical change, and it's not that it did
6	not do it, it's the "and" word, both of those
7	things have to be in place, is that accurate?
8	MS. HEINZE: You did a remarkably
9	good job asking that question. After your
10	info that you said you weren't going to word
11	it right, that was very good. Yes.
12	So, two things on this. You are
13	interpreting that exactly correctly. Both of
14	those conditions have to be met. And a
15	reminder, this is not what you're voting on
16	today. This is passed the NOSB.
17	What you are voting on today is how
18	we, as a Board, are choosing to move forward
19	on how we approach what is a significant
20	level.
21	Yes, Tracy.
22	CHAIR MIEDEMA: I understand your

committee did some work trying to understand 1 the use of the term "significant" in other 2 3 of governmental agencies, and particularly at USDA. 4 What all did you find out there? 5 MS. HEINZE: To be honest, not much. 6 7 This is a word that a lot of people struggle We tried to get other approaches. The 8 9 reason it took so long was we were really not enamored with the Material Working 10 11 because it's a hard definition, but there 12 we couldn't find anything much 13 better. So, after circling and circling, we 14 15 do think this is the right approach. Nick, I think you had a question. 16 MR. MARAVELL: Yes, on the technical 17 and functional effects in the final material, 18 19 sometimes you have intended, you 20 functional effects, and sometimes you have unintended. 21 22 So, let's say a petitioner sees no

functional effects from any detectable level 1 of a synthetic, but it may have unintentional 2 3 effects, but the petitioner's not aware of that, let's just say. 4 This would cover both? In other 5 words, if something came to the Committee or 6 7 to the Board through Technical Review or other that this has an unintentional functional 8 9 effect, then it would still be considered the residual -- the significant amount does have 10 11 a functional effect. 12 Am I making any sense? MS. HEINZE: Absolutely. Yes. 13 So, it is -- a couple comments on that. 14 This is technical and functional 15 effects in the use of the material, not in the 16 17 process of the material. Because clearly this synthetic input had a technical and functional 18 19 effect in the process, right. 20 So, for example, the example we always come back to is botanical pesticides, 21 22 which has been my poster child for this.

1	They're hexane-extracted. The hexane is
2	clearly there in the process for a reason, but
3	the Board, in '95, determined those to be
4	nonsynthetic because the hexane was not you
5	know, it was removed and then is not present
6	at a significant level in the resulting
7	material, and doesn't have a technical or
8	functional effect in the use of that material.
9	Yes, John.
10	MR. FOSTER: I think this falls
11	under the not for nothing category, but that
12	phrase is common to also the definition of
13	"processing aid" under 205.2 right now. And
14	I don't know to what extent the Materials
15	Working Group used that.
16	But in my mind, that's been helpful
17	in that I'm way more familiar with
18	characterizing processing aids than I am
19	considering the nature of all materials.
20	So, it had that has some
21	resonance for me, but only because I have had
22	to apply that in for the last 15 years in

certification. So, I think part of the hazard 1 with "significant" is that it's, I believe, by 2 3 definition, a relative term. And that anyone from any different position will not have the 4 same, you know, perception of it, so that 5 we're -- it's always going to be that way. 6 7 And to draw a line in the sand is think miqht be well-intentioned Ι а 8 9 naivete, but -- so as for "significant." that technical and functional effect in a --10 11 I'm grounded in that because -- only because 12 I see it in processing aids. And a de-foaming agent in a vat of 13 iuice is used to keep foam from 14 15 happening while it's being processed. bottle after the juice is done, that -- there 16 17 may be some remnant of that left, but there is neither functional nor technical effect in the 18 19 bottle. 20 So, I think perhaps it might be useful to also frame that question in terms of 21

when in the chain of events are you trying to

determine the effect.

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MS. HEINZE: Thank you, John. I had a thought as you were talking, and it is gone now.

But, Nick, I did forget as I was -as you were asking your question about the technical and functional effect, and that is in November 2009 had that NOSB why we Practices. And Point Number 3 was we really needed a reminder to the Board that on these really hard classifications, you need good technical expertise, you need good TRs. frankly, you need differences of opinion in your technical experts, because these are very difficult issues to flesh out.

And now I've remembered what I was going to say in response to John. The other thing is if you look historically in the record at materials that have been difficult to classify, they, no differently than this recommendation, have differences of opinion and that's okay, right?

1	This is as much about philosophical
2	differences as it is science. And so if you
3	look at botanical pesticides, if you look at
4	all of the materials the Material Working
5	Group evaluated, it's not like they get
6	classified unanimously, because of the how
7	people think about "significant."
8	Any other questions?
9	(No response.)
10	MS. HEINZE: Well, thank you very
11	much. I really appreciate Tracy's point.
12	This is a topic that has philosophical
13	discussion and debate, and I'm very glad that
14	we had some of that today. And I appreciate
15	the really good questions.
16	And with that, the Materials
17	Committee is done.
18	CHAIR MIEDEMA: Thank you, Materials
19	Chair Katrina Heinze. And we're going to
20	forge ahead again.
21	All right. Next up is Compliance,
22	Accreditation and Certification Committee

1	deliberations. Joe Dickson is the chair.
2	Lisa, you had a question?
3	MS. AHRAMJIAN: Sorry. This will
4	just take a sec. I had several people who
5	were interested in seeing the Livestock
6	Committee's documents. So, those are now
7	posted at regulations.gov.
8	So, if you want to write down the
9	number so that you can search for it later,
10	I'll give you a second to grab a pen, it's
11	ams-nop-11-0014-3469.
12	So, 3469 is the comment number.
13	Thank you.
14	MR. DICKSON: Thank you, Lisa.
15	The Compliance, Accreditation and
16	Certification Committee only has one item on
17	its agenda, and that is a discussion document
18	that will not be voted on at this meeting.
19	That discussion document is
20	entitled The Evaluations of Materials Review
21	Organizations. And because it's such an
22	expansive topic with so many stakeholders and

so much potential impact on the industry, we decided as a committee it would be best to sort of divide it into a two-part process involving a discussion document designed to elicit various substantial public comment, and then a recommendation in the fall.

Some background on this. Back in January, the Board received a memo from the Program which requested our assistance in the development of a clearer policy on the oversight of materials review organizations.

A materials review organization, just for the purposes of this discussion, is any entity that assesses specific materials, both generic and brand name, for organic production and their consistency with the regulation.

The Organic Materials Review

Institute of course is the most well-known of
these organizations, but we also have a number
of other organizations performing materials
review activities, including the Washington

State Department of Agriculture, the California Department of Food and Agriculture, and nearly all certifiers provide some sort of materials review function as a service to their clients in the course of their business.

The Committee worked with the

Program to identify a list of specific challenges that this recommendation or the future recommendation is designed to address, and I'm just going to read through those very quickly so they're on the record.

The first challenge is that all certifying agents review input materials for compliance with the regulations. Most certifying agents do not publish their list of approved materials and inputs, and that can lead to a lack of transparency of what materials have been approved for use in organic production, and also inconsistencies between certifiers as to which materials have been approved.

There are numerous organizations

that may or may not be certifiers who are evaluating materials for consistency with the regulation.

On numerous occasions, a material that is allowed by one certifying agent is prohibited by another. This lack of consistency in what materials are approved creates an uneven regulatory landscape, is unfair to organic producers and handlers and leads to certifier shopping to find the certifying agent that allows more materials.

There have been situations where the NOP has disallowed the continued use of materials, and material review organizations continue to list these materials as approved for some time after the Program has identified them as noncompliant.

There is no current single universal list of approved substances that is available to producers and handlers. And it is difficult for many producers and handlers to understand what materials are allowed and

which are prohibited in a given context.

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This regulatory uncertainty causes reluctance by many potential producers and handlers to enter the organic trade because of the lack of stability of the materials list and what they may be able to use at a given time.

OMRI and WSDA maintain publically available lists of approved materials. The process for removing substances from these approved materials list is not consistent. There is not a consistent process for material input manufacturers to appeal decisions that are made by these organizations or by certifying agents.

Currently, the NOP does not have any direct regulatory authority over materials manufacturers. If materials manufacturers violate the standards or fraudulently their product represent as approved NOP does not have the organic use, the authority to issue civil penalties or propose adverse actions.

Currently, organic producers and handlers bear the risk of using substances that may not comply with NOP regulations based on claims that are made fraudulently or mistakenly by the manufacturers of those materials.

This is a regulatory topic with dozens, if not hundreds, of stakeholders. Virtually all manufacturers, certifiers, materials review organizations and other parties have a horse in this race, and we wanted to make sure everyone had a chance to weigh in.

So, the discussion document laid out the challenges that I just read through, along with 14 specific pointed questions that were intended to solicit very concrete input from the public.

We received a pretty good number of comments. We heard from OMRI and WSDA, a number of certifiers, materials consultants,

several former members of this Board. 1 Accredited Certifiers Association on behalf of 2 3 the certifier community, and the Organic Trade Association all weighed in. 4 We literally have hundreds of pages 5 of comments to sift through as a committee as 6 7 we hunker down on this topic over the summer. We still would like to hear from a 8 9 few more stakeholders. There were only two individual certifiers that responded, and I 10 11 think we could reach out to a few more and get 12 robust representation from 13 community. And, know, we'll continue 14 you 15 talking to of course OMRI, WSDA, stakeholders in this conversation and the 16 17 National Organic Program as we lay out a very 18 detailed recommendation hopefully for the fall 19 NOSB meeting in Savannah. 20 That update that is my on discussion document. 21 Are there any questions? 22 (No response.)

1	MR. DICKSON: Thank you very much.
2	Tracy?
3	CHAIR MIEDEMA: Thank you, Joe.
4	Okay. We have quieted down up
5	here. Do people have any questions about
6	anything that they really wish they had asked
7	earlier and are disappointed that they didn't
8	think of it at the time?
9	I just want to give it to the table
10	to make sure that we really cast a wide enough
11	net to give opportunity.
12	Anything we missed from earlier?
13	(No response.)
14	CHAIR MIEDEMA: Okay. Seeing none,
15	hearing none -
16	MR. McEVOY: I think we're ready to
17	provide a more thorough response to your
18	question about the Handling Committee with the
19	change to the annotation.
20	CHAIR MIEDEMA: Okay.
21	MR. McEVOY: That should liven
22	things up a bit.
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1	(Laughter.)
2	MR. McEVOY: Okay.
3	CHAIR MIEDEMA: Please, go ahead.
4	MR. McEVOY: So, what we did is we -
5	I guess what we would consider if you removed
6	the annotation, that nutrient vitamins and
7	minerals that didn't have an annotation, then
8	what is the list of vitamins and minerals that
9	would be allowed?
10	And the way that we would look at
11	it, it would be limited to this particular
12	list that we pulled from various regulatory
13	references, including well, it compares 21
14	CFR 104.20(d)(3), has a list of the references
15	for 101.9, 107.100 and 107.10, and also have
16	a column on the 1995 TAP reviews for vitamins
17	and minerals.
18	So, it would include or be limited
19	to Vitamin A, Vitamin C, calcium, iron,
20	Vitamin D, Vitamin E, Vitamin K, thiamine,
21	riboflavin, niacin, Vitamin B6, folate,
22	Vitamin B12, biotin, pantothenic acid, choline

and inositol. 1 2 Note that we have received 3 petition for choline. Phosphorus, magnesium, zinc, iodine, copper, potassium, selenium, 4 manganese, chromium, molybdenum and chloride. 5 So, this would be what we would 6 7 consider if you remove the annotation, that this would be the list that we could reference 8 9 based on removing the reference and have a specific -- this provides a specific list of 10 11 the regulatory reference as well. 12 CHAIR MIEDEMA: Thank you. Jay? 13 MR. FELDMAN: Thank you for that. 14 understanding is that those 15 Mγ lists are developed by FDA to be essential 16 vitamins, essential nutrients, and essential 17 18 minerals. 19 And there's nothing in the language 20 here if we remove the annotation to 21 CFR 104.20, that describes these nutrient - or 21

vitamins and minerals

these

nutrient

essential. 1 So, why couldn't I, as a producer, 2. introduce any vitamin or any nutrient that I 3 wanted to without that sort of limitation? 4 MR. McEVOY: Yes, I think that's the 5 question. Is this - if we remove the 6 annotation, would that then create an open-7 ended list of vitamins and minerals? 8 9 And that's why we would say and put on the record here, that our understanding of 10 11 that, how we would interpret that, is that it 12 would be limited to these particular vitamins and minerals. 13 CHAIR MIEDEMA: Sounds like a very 14 15 reasonable compromise. So long as we don't have these dueling annotations both out there 16 17 soliciting public comment, you know, we're going to live with however you decide to guide 18

And we know every time we submit a material to the Program, that you can give contour to how you interpret and enforce that

the public.

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1 material's use. 2. MR. McEVOY: Yes, we cannot add 3 things to the list that the Board does not approve, but we don't have to add things to 4 5 the list that the Board does approve. if 6 And you in your recommendation have - we can understand the 7 intent of that, then we can implement that 8 9 based on the intent of the Board. And so, what we're saying is that 10 11 our understanding of what that would include 12 at this point in time would be limited to this particular list of vitamins and minerals. 13 CHAIR MIEDEMA: So long as you all 14 15 would - okay, and then I'll call on you, Katrina -- would be okay with the fact that we 16 17 haven't floated this -- those CFR listings out 18 to the public. And we would prefer to not 19 tack them on as an annotation. 20 We're going to leave that to you to do as quidance after we were to propose a non-21

annotated material.

And by the way, Jay, this might 1 speak to some of your questions and concerns, 2 3 it still would be a two-vote process. first vote would be for the existing material 4 as is with the current annotation, because 5 our new process for changing an 6 7 annotation during sunset. And the second vote would be a strike of -- a striking of the 8 annotation. 9 Katrina, then Jay. 10 11 MS. HEINZE: Am I allowed to ask 12 Miles a question? I know he doesn't have to 13 answer. said as 14 long as you could understand our intent in your response, can 15 that intent be the discussion that we had as 16 a Board, or do we need to write a document to 17 18 make that clear? MR. McEVOY: This is what we are 19 20 understanding of it -- the intent of the Board at this point, is this list of substances. 21 22 So, what we need from the Program,

1	what the certifiers need, what handlers and
2	processors need, is a clear list of what's
3	allowed and what's not allowed.
4	And so we're saying that based on
5	removing the annotation, it would be limited
6	to these particular substances.
7	So, you can concur with that, or
8	you can say, oh, that's not really what we
9	mean.
10	So, it's up to you to respond to
11	this of either saying, okay, this looks
12	reasonable as a reasonable way to proceed, or
13	asking, you know, additional clarifying
14	questions.
15	CHAIR MIEDEMA: Jay.
16	MR. FELDMAN: Which is what I have,
17	an additional clarifying question.
18	Are those materials that you list,
19	substances you listed, are they lists
20	incorporated into CFR sections? Can you tell
21	us which sections those are?
22	MS. BROWN ROSEN: Yes, it's at the

1	top of the column there, Jay.
2	So, Column 2 is the current 104.20
3	that's referenced in the rule. And then
4	Column 3 is the 101.9, which is where the
5	referenced daily intakes are indicated in 21
6	CFR.
7	And then Column 4 is the section
8	that refers to infant formula.
9	CHAIR MIEDEMA: Let's see if anyone
10	else has anything. You and I have both used
11	up our two.
12	Joe Dickson, and then Nick.
12 13	
	Joe Dickson, and then Nick.
13	Joe Dickson, and then Nick. MR. DICKSON: I'm having a little
13 14	Joe Dickson, and then Nick. MR. DICKSON: I'm having a little trouble seeing, from a Board policy
13 14 15	Joe Dickson, and then Nick. MR. DICKSON: I'm having a little trouble seeing, from a Board policy perspective, how this is not changing an
13 14 15 16	Joe Dickson, and then Nick. MR. DICKSON: I'm having a little trouble seeing, from a Board policy perspective, how this is not changing an annotation to make it less restrictive during
13 14 15 16 17	Joe Dickson, and then Nick. MR. DICKSON: I'm having a little trouble seeing, from a Board policy perspective, how this is not changing an annotation to make it less restrictive during sunset. And I'm not sure if anyone on the
13 14 15 16 17 18	Joe Dickson, and then Nick. MR. DICKSON: I'm having a little trouble seeing, from a Board policy perspective, how this is not changing an annotation to make it less restrictive during sunset. And I'm not sure if anyone on the Board has any light to shed on that, because
13 14 15 16 17 18 19	Joe Dickson, and then Nick. MR. DICKSON: I'm having a little trouble seeing, from a Board policy perspective, how this is not changing an annotation to make it less restrictive during sunset. And I'm not sure if anyone on the Board has any light to shed on that, because I see that, you know, removing an annotation

1	MR. DeMURI: I'd have to agree with
2	you. I think we're moving it does restrict
3	it because there's a lot of the things being
4	used besides these right now.
5	MR. FOSTER: I have a question.
6	CHAIR MIEDEMA: John.
7	MR. FOSTER: It's clarifying, Steve,
8	what you just said.
9	Did you just say that would the
10	I guess my question is, would the net effect
11	of what Miles just described end up in a
12	shorter or longer list than is currently in
13	effect as a function of regulatory language?
14	MR. DeMURI: I believe it would
15	result in a shorter list.
16	MR. FOSTER: Then I don't if
17	we're going to if the net effect is a
18	shorter list, then I don't see that as being
19	less restrictive.
20	CHAIR MIEDEMA: Miles McEvoy.
21	MR. McEVOY: Yes, it's a matter of
22	perspective of whether it's a shorter or a

1	longer list.
2	Based on the prior interpretation
3	by the Program, this is a shorter list. Based
4	on the new understanding of the meaning of
5	104.20, it's a longer list. Based on the
6	intent of the '95 recommendation to allow
7	infant formula to include essential nutrients
8	and vitamins, it's consistent.
9	So, it's a little bit depends on
10	your perspective of whether it's a shorter or
11	longer list.
12	We're in an interesting conundrum
13	right now.
14	(Laughter.)
15	CHAIR MIEDEMA: Katrina.
16	MS. HEINZE: So, this is my second
17	comment. So, I'm not talking after this.
18	Might I suggest that this is all
19	good information and that Handling Committee
20	meeting that we know we're going to have, that
21	we do that and try to figure out what we're

going to come forward with.

1	CHAIR MIEDEMA: Before we start
2	deviating from protocol and extending this
3	discussion too much further, does anyone who
4	has not been able to voice an opinion on this,
5	have one that they would like to voice now?
6	Jay.
7	MR. FELDMAN: I'm not expressing a
8	position on this, but we did the policy we
9	passed enabled us to adopt annotations that
10	are equivalent to or more restrictive or
11	clarifying, and one again, I don't know
12	what my position is on this, but one might
13	argue going back to the history here, that
14	this is clarification or updating of the
15	previous intent.
16	At the time this was originally
17	adopted, I don't believe there was an infant
18	formula. Am I correct, on that CFR?
19	CHAIR MIEDEMA: FDA has said that
20	this annotation that is currently on 605(b)
21	does not cover infant formula.
22	MR. FELDMAN: That's just another

1	option we have to if this is somehow
2	clarification, then it would fit within the
3	guidance of our policy.
4	CHAIR MIEDEMA: Yes. All right.
5	Thank you very much for the feedback, National
6	Organic Program.
7	Next up is the Policy Development
8	Committee. Chairman Barry Flamm, please
9	proceed.
10	MR. FLAMM: I'm afraid, like the
11	animals that we talked about their welfare
12	this morning, I also need fresh air and
13	exercise for my good health and I'm losing it
14	right now. Headache and sore throat. So,
15	I'll proceed along.
16	We have two items on the policy
17	agenda. The first is a review of the position
18	descriptions and role of the Vice Chair and
19	the Policy Committee as relates to what
20	instructions we have in the Policy and
21	Procedures Manual.
22	And Joe was the lead person on

1	that. And, Joe, if you would please present
2	our recommendation?
3	MR. DICKSON: Sure thing. This is
4	a pretty straightforward recommendation that
5	deals with the linguistic inconsistency within
6	the Policy and Procedure Manual.
7	That inconsistency surrounds the
8	Policy and Procedures Manual itself and who is
9	responsible for its upkeep.
10	Section 2 of the Policy and
11	Procedures Manual currently describes the
12	roles of the Vice Chair and reads, the Vice
13	Chair shall act in the absence of the chair.
14	The Vice Chair shall also be responsible for
15	the maintenance and upkeep of the Policy and
16	Procedures Manual.
17	Section 4 describes the
18	responsibilities of the Policy Development
19	Committee, and also gives the Policy
20	Development Committee the responsibility for
21	managing the PPM.
22	So, the PPM gives responsibility

for managing itself in two different spots to two different entities. So, this recommendation addresses that.

The way that it addresses that is by inserting language in the job description of the Vice Chair, or actually changing language, so that it reads the Vice Chair shall serve as a member of the Policy Development Committee and work collaboratively with the PDC members on the maintenance and upkeep of the Policy and Procedures Manual.

The section on the job description of the PDC is updated so it says, the PDC maintains the content and updates to the NOSB Policy and Procedures Manual in collaboration with the NOSB Vice Chair and new member guide.

And so that just synchronizes those two job descriptions and make it clear that it's the joint responsibility of the Vice Chair working as a member of the Policy Development committee to manage and maintain the upkeep of the Policy and Procedures

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1	Manual.					
2	The Committee passed that					
3	recommendation unanimously with five members					
4	voting in favor, and none against, and no one					
5	absent. And that is my presentation of that					
6	recommendation.					
7	MR. FLAMM: Do you want to take any					
8	discussion now, or later?					
9	MR. DICKSON: Sure. Is there any					
10	discussion or questions on this one?					
11	John.					
12	MR. FOSTER: What was the origins of					
13	this? Where did this come from? What was the					
14	need?					
15	MR. FLAMM: The inconsistency was					
16	identified by a member of the Board. I don't					
17	remember who or when. Was it Tracy?					
18	Yes, Tracy in her meticulous					
19	reading of the Policy and Procedures Manual,					
20	perhaps in gearing up to be Chair, discovered					
21	this inconsistent language.					
22	MR. FLAMM: As a little additional					

background, I did talk to Rigo who was Chair 1 at the time this was inserted. And he said it 2. 3 intentional to qet the Vice Chair involved. He thought that was important, and 4 important link into the other operations of 5 the Board. 6 7 But I think certainly the wording was -- that is in the Policy and Procedures 8 9 Manual was not very clear and led to a little confusion, but nobody paid any attention to it 10 11 for a couple of years until Tracy brought it 12 to our attention. MR. DICKSON: All right. Without 13 further discussion or questions, I'll turn it 14 15 back to you. MR. If there's no 16 FLAMM: questions or discussion, I'll move to the next 17 18 item which is, again, a clarification and 19 update in the Policy and Procedure Manual. 20 And for particularly the members, you know, the Policy and Procedure 21 22 Manual is a quide to assist the Board in the

conduct of our business. And you've already seen in this meeting that it's frequently referred to. So, it's kind of like our Bible.

So, it's quite important and we constantly are finding that there are things that aren't as clear as they once were. And it usually shows up with a real life situation when we find our procedures aren't dealing with it completely.

And that's what triggered this particular recommendation and review was difficulties at the last Board meeting in handling procedures and handling the Committee recommendation.

And as you all know, we do an awful lot of our work in the committees preparing recommendations or discussion documents, and that's where a lot of the grunt work gets done. And then we have, as you all know, some -- we expose these ideas to the public and get often a vast amount of additional information. And then we present it in the Board meeting

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and we get more ideas.

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So, often in this process, the Committee may either change its mind or want to withdraw its recommendations for further consideration.

So, this recommendation is -- adds language, although it does doctor up other words and language in this section. And the changes outlined in the are recommendation, but the key part is that we were recommending that the -- that after the Committee presents the discussion for public the recommendation for discussion and for public comments, that's done and it's at the meeting when it's presented, that up until there's a motion and a vote, the Committee -- a Board motion and vote, that the Committee could withdraw the recommendation for further work.

This recommendation on either -both of our recommendations, we didn't get
very many public comments, but we did get a

1	couple of suggestions for language change on					
2	this particular one. And I will get the					
3	Committee together to see if they think this					
4	improves our recommendation.					
5	But, essentially, all the public					
6	comments we have received on this					
7	recommendation supported the notion that we					
8	needed to clarify this part of the manual.					
9	Any questions, please? Discussion?					
10	CHAIR MIEDEMA: John.					
11	MR. FOSTER: Sometimes the					
12	committees, as a function of receiving public					
13	comment here, changes the recommendation at					
14	during the course of a public meeting.					
15	How I don't know what all the					
16	language following Number 4 on Page 20 says.					
17	So, I'm assuming the intent was not to change					
18	that, not to mandate a public comment after					
19	changes to a recommendation at a public					
20	meeting.					
21	So, this wouldn't affect that, but					
22	does the language in here leave that alone,					

leave that allowance alone? 1 2 MR. FIJAMM: T'm not. sure Ι 3 understand your question, John. But I do-after reading a couple of public comments -- I 4 do think we need some clarification on this. 5 think there is 6 And Ι some good language 7 proposed by a couple of commenters that I want to go over with the Board and -- but it --8 9 maybe if you repeated your question -- I may be missing the point you're making. 10 11 MR. FOSTER: I may not have phrased 12 it particularly well either. So, Number 1 in the recommendation, 13 it Committee 14 says the prepares discussion 15 recommendation or document 16 agreed to in the committee work plan. then the recommendation or discussion document 17 is posted for public comment. 18 19 And I - my assumption is that you 20 don't mean to exclude the opportunity for a committee to make a recommendation, let's say, 21

tomorrow night. But according to this, then

all recommendations have to be posted for 1 public comment, which won't be allowed. 2 For 3 example, some of the recommendations that are going to be changed, say, tonight or tomorrow 4 night, those won't go out for public comment. 5 And I'm not saying they should. 6 7 I'm saying that I want to make sure that these broad steps don't exclude that from continuing 8 9 to happen. language 10 And if that appears 11 elsewhere, that's fine. I just don't see it 12 here. MR. FLAMM: I think that's a good 13 And I think one of the public 14 15 commenters made point and suggested Understanding what our intent was 16 lanquage. 17 gave us some language to deal with that. 18 This was sort of - Number 3 is 19 really the new one. The others are already in 20 the Policy and Procedure Manual. So, this may not quite tie together as well as it should 21

have.

1	MR. FOSTER: I think I understand
2	the intent, and it's consistent with what I
3	would hope.
4	MR. FLAMM: Any other questions or
5	discussion on that?
6	(No response.)
7	CHAIR MIEDEMA: Thank you, Chairman
8	Barry Flamm, of the Policy and Procedures
9	Committee.
10	Tomorrow our agenda begins at 8:00
11	a.m. and is a day completely designated for
12	public comments.
12 13	public comments. I'm going to make an announcement
13	I'm going to make an announcement
13 14	I'm going to make an announcement again that I made earlier today, which is that
13 14 15	I'm going to make an announcement again that I made earlier today, which is that the Tilth Producers of Washington are hosting
13 14 15 16	I'm going to make an announcement again that I made earlier today, which is that the Tilth Producers of Washington are hosting a welcome event for the entire organic
13 14 15 16 17	I'm going to make an announcement again that I made earlier today, which is that the Tilth Producers of Washington are hosting a welcome event for the entire organic community. And I'll give you the location in
13 14 15 16 17 18	I'm going to make an announcement again that I made earlier today, which is that the Tilth Producers of Washington are hosting a welcome event for the entire organic community. And I'll give you the location in case you want to jot this down.
13 14 15 16 17 18 19	I'm going to make an announcement again that I made earlier today, which is that the Tilth Producers of Washington are hosting a welcome event for the entire organic community. And I'll give you the location in case you want to jot this down. It's at the Palace Ballroom, 2100

1	that there will be organic food, organic wine,
2	beer, non-alcoholic beverages, a no-host bar,
3	live music and a \$10 suggested donation.
4	Any other announcements before we
5	close for the day?
6	Lisa.
7	MS. AHRAMJIAN: Just to remind folks
8	if anyone wants to give public comment
9	tomorrow and isn't already signed up, to
LO	please sign your name in the sign-up sheet in
11	the lobby. Or if you have any questions about
12	your public comment, please see me right after
13	we recess. Thanks.
14	CHAIR MIEDEMA: Thank you, Lisa. We
15	are adjourned until 8:00 a.m. tomorrow
16	morning.
L7	(Whereupon, the above-entitled
18	meeting was adjourned at 3:48 p.m.)
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<u>C E R T I F I C A T E</u>

This is to certify that the foregoing transcript

In the matter of: National Organic Standards Board

Before: US Department of Agriculture

Date: 04-27-11

Place: Seattle, Washington

was duly recorded and accurately transcribed under my direction; further, that said transcript is a true and accurate record of the proceedings.

Court Reporter

Mac Nous &