U.S. DEPARTMENT OF AGRICULTURE

GRAIN INSPECTION ADVISORY COMMITTEE MEETING

THURSDAY
AUGUST 15, 2019

The Committee Meeting was convened at the AMS National Grain Center, 10383 North Ambassador Drive, Kansas City, Missouri, in the Main Conference Room at 8:00 a.m., Linsey Moffit-Tobin, GIAC Chair, presiding.

PRESENT:

BRUCE SUTHERLAND, Michigan Agriculture and Commodities
JOHN MORGAN, Supreme Rice
RICK ROBINETTE, Sioux City Inspection
SARAH SEXTON-BOWSER, Kansas Producer
JOHN LINDGREN, Director of United Grain Corporation
MATTHEW KERRIGAN, Vancouver, Washington ETT
BRENT TURNIPSEED, South Dakota State University
RYAN KUHL, North Plain Inspection
RANDY BURNS, Arkansas Bureau of Standards
CHAD BECNAL, SGS
DAVID AYERS, Champaign Grain Inspection
TOM TUNNELL, Kansas Ag
MARK WANTE, North Dakota Farmers' Union
TODD RUSSOM, Anheuser Busch
ALSO PRESENT:

BRUCE SUMMERS, AMS Administrator
ARTHUR NEAL, FGIS Deputy Administrator, DFO
KENDRA KLINE, Assistant to the Deputy Administrator and the Advisory Committee Specialist
CONTENTS

Call to Order and Welcome .......................... 4
Greetings ........................................... 10
Facility Overview ................................. 18
Agenda Overview and Meeting Goals ............. 19
FGIS Updates
Financial Overview ............................... 28
Resolutions Update ............................... 34
AMS Update on Hemp Rulemaking ................. 36
Boundary Exceptions Discussion ................. 68
Discussion with the National Organic Program
(NOP) - Organic Certification Information on
Official FGIS Certificates ....................... 166
Introduction of Draft GIAC Policy and
Procedures Manual ............................... 233
Adjourn ............................................. 237
PROCEEDINGS

(8:00 a.m.)

CHAIR MOFFIT-TOBIN: Can everybody hear me? Good. Now, that we have established our quorum, the meeting will now come to order. I would like to recognize the members of the 2019 Grain Inspection Advisory Committee.

We have Bruce Sutherland with Michigan Agriculture and Commodities. John Morgan with Supreme Rice. Rick Robinette, Sioux City Inspection. Sarah Sexton-Bowser, Kansas Producer. John Lindgren, Director, United Grain Corporation.

Matthiew Kerrigan, Vancouver, Washington ETT. Brent Turnipseed, South Dakota State University. Ryan Kuhl, Northern Plain Inspection. Randy Burns, Arkansas Bureau of Standards. Chad Becnal, SGS.

David Ayers, Champaign Grain Inspection. Tom Tunnell, Kansas Ag. Mark Wante, North Dakota Farmers' Union. And Todd Russom,
Anheuser Busch.

I also want to thank and recognize our AMS Administrator, Bruce Summers. We really appreciate you being here today. And our FGIS Deputy Administrator and for the committee purposes, our designated Federal Officer, Arthur Neal. The Assistant to the Deputy Administrator and the Advisory Committee Specialist, Kendra Kline.

I also want to thank the Secretary for this dynamic group he has chosen, and everyone else that has taken the time and sees the value of being here today. We appreciate everybody coming here.

I'm going to start today off with a question, and don't be shy. So, raise your hand if you believe everyone in this room has at least one thing in common. Think about it; what is that commonality. Don't be shy. I won't call on you; probably don't want to hear some answers.

That commonality we all share is the commitment to the integrity and progress of this
official system. That is why we're all here today. Every person at this table was chosen for a reason. You were each selected because of your unique knowledge, experience and background.

Having a diverse committee, with unique viewpoints, ability, experiences, outlooks, backgrounds, skills sets is pivotal to the success of the official system.

I wanted to tell you just a short story about the first time that I learned about the importance of diversity. I didn't realize then, but I understand it now. I grew up the last of four daughters, and my dad always says that he wouldn't have it any other way. But there's many days where I'm sure he didn't even know he believed that.

But on this day, I was about 12 or 13 years old, and I was farming with my dad and his three farmhands. At one point, we were broken down. For some reason, we had no cover to the vent. We're picking 18, 19 percent moisture corn, and
there's no dryer, no spreader, no serrator and no room in any other bin.

So, while they're trying to fix electricity, my normal course of action is, obviously, to sit back and wander off into the abyss, waiting for them to figure out what the solution is. Of course, back then we didn't have the efficient equipment that we have today, so it took us much longer to harvest than it does today with the same amount of acreage.

Once they determined that the electrician could not until the next morning, and after a lot of cussing, kicking, throwing hats, they decided that they were going to come to a halt that day. And I didn't understand. It was a perfectly nice day. You cannot stop farming on a really nice day.

So, you had individuals with very similar backgrounds who were looking at one solution. You know, and it just, it seemed so simple to me, and I was afraid to speak up. You
know, so that's why today, with your diverse backgrounds, don't be afraid to speak up. Don't think that you don't have the answer of the solution.

So, that's why you were chosen. That's why you were picked. That's why we have such a unique, awesome group. Brent, you said something last night that really hit me, you know, about well, I'm just a seed guy. You know, but I have all these thoughts; I have all these ideas, you know, for the grain inspection, in the good of the official system. That's perfect.

That's why we're here. That's why all of us are here today. So, in order for any organization like the USDA to be truly successful, it's vital to have diversity. But diversity is not solely based on gender, skin color or ethnicity.

The real key to success is having diverse experiences, backgrounds, thoughts and views and perspectives in order to best serve our customers, producers, handlers, exporters and
importers to meet the world's dramatically increasing need for food, fuel, shelter and infrastructure.

With diversity, it brings new ideas, new solutions, innovations and progress. We might not all have the same path to get there, but today we will have thoughtful, respectful discussions about how to get there.

So, let's move forward together as one cohesive unit with at least that one thing in common, the integrity and progress of the official system. Thank you. I'm going to turn it over to Arthur.

MR. NEAL: Good morning everyone. I'm going to take this opportunity to introduce our administrator for the Agricultural Marketing Service, Mr. Bruce Summers. I'm not sure how many of you have met him, but Bruce is a very dynamic and powerful leader; a man with great integrity.

That's one of the beautiful things that we appreciate about the Agricultural Marketing
Service out there, and the Agricultural Marketing Service is about 25 years now.

Bruce is one of the first leaders that I met in the organization when I joined back in 1994. And so he's come from D.C. just to touch base and spend some time with us today. So, please receive him as he comes to the podium.

MR. SUMMERS: Well, good morning everybody. So, I can only give so many speeches a year when Arthur introduces me because it costs me $100 every time he says stuff like that, and I have to pay him.

So, can I close this laptop and put my notes here? Am I going to mess that screen up? All right, cool. The last thing I want to do is come here and break the IT stuff at 8:00 o'clock in the morning, right?

So, Linsey, great opening remarks. Thanks for that. You guys picked a great Chair. That was a great introduction, and I don't really have anything left to say now. You said it so well.
But I'm never at a loss for words, so I'll keep going.

So, you know, after the merger of AMS and Federal Grain Inspection Service, one of the things that we wanted to do, back then it was Dana Cole who was sitting in the chair where Arthur is now; we really wanted to get this, this advisory committee back up and running.

And looking at the representation around the table, and looking at the, I'm energized just by looking at this room and how many people are here. I will tell you, sometimes you'll go to advisory committee meetings and it will be just the committee and a few USDA staff and it's quiet.

I came in this morning; man, there's people everywhere. It's loud in the back. I don't know who all those people are, but they were loud.

So, I mean, I kind of, I'm feeling good about the fact that it feels robust, it feels good. I hope you're as excited as I am. I think this is really
good.

You know, I was fortunate enough to be here last year, and gave some remarks and encouraged you guys to get going. And, my lord, you guys walked out of here with 17 recommendations. All right, so I'm here this time to say slow down. No, I'm not; not at all.

We'll take another 17, or we'll take whatever you got. That's why you're here. That's what we need from you, and it is really important. So, I thank you for the way you've gotten started, and we're really looking forward to seeing where this meeting goes, and beyond.

I'm not here to give a little speech. I don't want to be the guy that gets your agenda late, we'll keep you on track. Why I really wanted to come today is one, to show support. Two, I really want to listen. I want to hear about the issues. I want to be able to represent you back in Washington.

When issues are coming up, I need to
understand the challenges you're facing and solutions you're looking at. And that's really why I'm here, so I'm going to sit over there and I'm going to listen more than anything else.

I'm happy to answer any questions at any point, now, later, lunchtime, or this evening. But I'm really just here to really thank you for what you're doing. And also, provide you just a little bit about, you know, what we're trying to do at AMS, and I think it's kind of simple.

Our goal at AMS right now is to make sure the Federal Grain Inspection Service is first class, best in class, best inspection agency in the world. Nothing less than that. That is our goal, okay? This committee is vital for us being able to reach out and maintain that.

We've got to have your feedback. We've got to have the collaboration that comes through meetings like this, and all the discussions that go on in between. And we need the folks who took the time to come and sit in the back in the
uncomfortable chairs without a table to lean on. We need you, too.

We need your feedback before the meeting about the topics you think we should talk about. We want your feedback after the meeting.

So, you all stakeholders in the audience are really important, as well. I'm not going to dismiss your importance at all.

And so, I'm going to go a little off script, and I didn't talk to Arthur about this, but I want to ask you guys to consider something because, as you know, at USDA AMS does all the grading now. When FGIS came over to AMS, it kind of completed that sweep.

AMS is now responsible for every product that USDA grades, from apples and oranges to grain and beef and chicken and eggs and butter; you know, on down the line. It's all at AMS. And, you know, there are a lot of challenges in running grading programs and you know what they are in the grain sector.
But one of the things that I'm talking to all of my inspection programs about is how we can start to use technology to improve the way we provide the services. And so, Arthur, if you stand here, might be kicking me, but I would appreciate it if you all would give that some thought.

We'd like to hear from you on how you think technology could help us with respect to efficiency, maybe cost. Maybe it's just about accuracy. Maybe it's about consistency.

Some of you may know about the cotton program. We class every bale of cotton that's grown in the United States. And the numbers that came out this week, they may be talking about 22 million bales of cotton; in which case, we will grade cotton all year long. We won't have a break if there's really that much cotton.

But the cotton classing, cotton grading program is really gone to almost completely an automated process. Someone touches it when they pull the samples and someone touches it when they
feed the sample into the equipment. And then, from there on, it's pretty much automated.

And it works really well, and very inexpensive. And it seems to be extremely timely. And so we'd like to start to talk to other grading customers about what that would look like for the grain industry. And cotton is cotton, right? In grain we have corn and soybean and we know that's more complicated; when we talk about grain, we're not just talking about one commodity.

But we'd like to hear from you. You know, we've started using cameras in the grading of beef as an aid to the graders. And I think that has helped us a lot with consistency. So, there's some other things that we're starting to do on the -- side.

So, I would just give you that charge, and I didn't talk to Arthur about this, but I think, he's shaking his head yes. So, that's just a charge I'd like to put in front of this group. I'm not asking that you do anything, other than to consider
this concept and begin to delve into it when you have some time.

Because I think, I think our grading programs across AMS are ripe for investing in technology for a lot of different reasons, and we'd like to hear your input on something like that. So, I told you I was going to keep on schedule. Now, I've got to get back on script so Arthur will talk nicely about me the next time I give a speech.

But really I just want to thank you all, especially the committee members, right? You know, you're volunteering. We know you have businesses you could be at. I know how glamorous travel is; it's always a bit of a challenger, right? We thank you for your time. We really appreciate it. We need you.

And if there's anything I can do to help you all on this committee, anything I can do to help you all at your businesses, anything I can help you all with in Washington, D.C., please; now we know each other, right? Give me a call, send
me an e-mail, and I'll help you any way I can. So, thank you and I hope we have a great, great meeting. Thank you.

MR. NEAL: Thank you, Bruce. I really appreciate you coming and spending time with us. And also sharing those inspiring words. Because when I share you'll see we're kind of on the same page. We'd like to now call up Ms. Kendra Kline who's going to give us a facility overview.

MS. KLINE: Okay, just a quick rundown of the building. Your bathrooms, restrooms are going to be right down this hallway where you came in. There's also a drinking fountain. If for some reason the fire alarm goes off, we're going to just organize out the hallway here, and you're going to take a right out into the patio.

If there is a tornado alarm that goes off, going to go down the hallway right out here through the closed doors, and we'll escort you down the stairs into a waiting area. Also, we ask that you abide by any posted signs around the building.
And we have a court reporter here today. So, when you speak, make sure you talk into a microphone, and you hold it close and you say your name and affiliation. I think that's everything.

MR. NEAL: Thank you, Kendra. Now, we'll have the agenda overview by the Chair.

CHAIR MOFFIT-TOBIN: Thank you. Today Arthur's going to give us the updates, the FGIS updates. And then, after that, Denise Ruggles with FGIS executive program analysis; she's going to give us the financial overview. We have a small switch. We're going to do the AMS update on hemp rule-making at 9:15 this morning. We'll take a short break.

Resolutions update is Dr. Tim Norden. Boundary exceptions discussions with Karen. We had a nice discussion yesterday with Karen, so welcome them back. I'm actually surprised that you guys came back.

We will break for lunch, and then the
national organic program, Betsy Rakola, will be here to discuss certification information on an official FGIS certificate. We've been talking about the idea about issuing organic grain on official certificates. And, under AMS, what we can do for collaboration between all of us. So, we're really looking forward to listening to her to see what that would take for that to happen.

We'll have a resolutions update continued with Arthur, break, introduction to our draft grain inspection advisory committee policy and procedures manual. And that will be, and then we'll adjourn for the day.

As far as our meeting goes, last meeting's minutes were already approved by Ms. Cooper for our goals. Keep in mind, members must maintain the highest levels of integrity, responsibility to your duties, ethical standards and act impartially for the good of the whole system.

Our job is to listen and advise FGIS
on the programs, policies and services it delivers under the United States Grain Standards Act. Our goal is to meet the needs of our shareholders who operate in a dynamic, challenging and ever-changing marketplace.

We need to identify the needs, respectfully discuss, brainstorm, feed off of each other, and provide recommendations to submit to the Secretary. I want to make sure that we focus on the agenda items on hand, and do not waiver. We also, as a reminder, two-thirds of our majority vote shall be the decisive of any vote.

Moving on to FGIS updates with Mr. Neal.

MR. NEAL: Well, good morning again, everyone. This is not going to be your typical FGIS update this morning. Because we're going to have a lot of updates, and we're going to be providing a response to the 17 committee recommendations we received at the last meeting.

I see Tony right there. Welcome back, Tony. Tony just had a new baby girl. So, he got
a waiver to come to this meeting. That's how important you all are. But I think it goes that,
you know, Tony's presence here actually speaks to a lot of what we're going to talk about today.

And from an FGIS update perspective, I just kind of want to share with you a little bit of the things that's swirling around in my head and my heart concerning the organization, the people, the people that we serve, the official network.

The first thing I want to talk about is the transformation part of the process. This is my fourth month; I'm concluding my fourth month as the deputy administrator for the Federal Grain Inspection Service. And since I've been here, there's been a lot going on.

I mean, day one, I've just been drinking out of a fire hose. It's all been good stuff. Every person I've met, every issues that we've been learning about and addressing has all been for the good of the official system.
But I've also noticed that there are a lot of things that we needed to begin to transform. When FGIS transitioned into the Agricultural Marketing Service, Bruce mentioned one of the first things that they did was to re-initiate, re-activate this committee.

My coming in in April and learning about the last committee meeting, seeing all the recommendations, I noticed like, wow, that's a lot of recommendations, and how did they get to this, how did they get to the point of making these recommendations? What was the process, and things of that nature.

And noticed that there were some things that we could probably do to strengthen the position of the committee, to provide some additional structure, to enhance the thinking of the committee; how it views itself, so that we could begin to transform the type of recommendations that come from the committee that advise FGIS and the Secretary on how we can provide better service.
And so over the, I guess yesterday, and even prior to coming to Kansas City for this meeting, we spent some time drafting a policies and procedures manual for the committee to begin that process. And I believe that, through the discussion you'll hear today, you will feel that these policies and procedures, and the concepts that are laid out in the manual, have begun that process for us.

It also gives us a way to engage you better, more meaningfully. It's not that you will just be able to come to a meeting and listen. But we want to engage you prior to coming to a meeting, so that you could provide us feedback and comments on things that will be considered by the committee for official vote, for official action.

Your voice matters. And as we go throughout today, you will hear about other activities going on in FGIS where we're going to need more input from you to help us do our job. Now, we talk to a lot of you all on an individual
basis. Tony talks to you. Karen talks to you. Byron talks to you. I talk to some of you; not as much as probably the staff does.

We want to make sure that you understand as part of this transformation process that collaboration is key. Bruce mentioned it already. Collaboration is key for us because in the Agricultural Marketing Service, our objective is to help facilitate the marketing of agricultural products more efficiently.

We can't provide the grading and inspection services to the various industries that we serve if we don't really know the issues and work together to solve the issues. And so, we want to make sure that you understand.

And as FGIS is coming to the Agricultural Marketing Service, part of our transformation process is to elevate collaboration so that you understand that we're in this together.

Things that we can do, we will do. Things that we cannot do, we'll let you know that we can't do
it. But we want to be in communication with you.

The other thing and part of the transformation process we discovered is staff. It's always good to be able to accomplish work, but you can't do it without people. And so one of the things I've really prioritized is how do we value our people? Not just our employees in the organization, but also those that we serve.

We want you to understand that we value you, and we value our people. So, we're going to be investing more in them in terms of helping them figure out things about their own careers within the organization. And, to be honest with you, help them to be more than what our organization can provide for them if it's in them.

We want to grow leaders; leaders for today and leaders for tomorrow. And, as we do that, we want you to be able to see impacts along the way. We don't just want to come and update you and tell you niceties and this what's going to
happen; we want you to see results.

You'll hear some of those results through our updates. You will see more results throughout the upcoming year. And, as we do that, we hope it puts us in a better position to manage the official system.

There are a lot of inspectors and graders out there in the field. For our designated and delegated officials, their hands are full. We've got people all over the place with heavy responsibilities. How do we help you do your jobs more efficiently, more effectively?

We don't want to complicate matters for you; we want to make things easier to accomplish. We want to make sure that they're sensible, that they're reasonable, and that the solutions that we come up with work for the good of everyone.

And so, this goes back to the transformation process, which includes the collaboration. We can't do that without collaboration, but it's going to take time. And
if you look at all of these things, it's going to take us a little bit of time to make sure it all comes together.

But I'll guarantee you that it will come together through our collaborative work. And so this committee is going to play a key role in that, and you'll hear more from them and us about how we'll be moving forward. So, I want to thank you for your time, and I look forward to engaging throughout the rest of this meeting. Thank you.

CHAIR MOFFIT-TOBIN: Next we have Denise Ruggles, our FGIS Executive Program Analyst.

MS. RUGGLES: Good morning, everyone. So, I'm going to talk about our financial status right now. Many of these numbers are still estimates because we just finished July, so we have two more months to go, and I won't have final numbers until November 1st.

I'm going to talk about our user fee, revenue and obligations by the accounts, the user
fee funding obligations and percentages, the grain appropriated account, the FGIS appropriated funding user fee obligations and revenue percentages, and then the fee reviews.

So, this is our grain inspection and weighing account. You can see that we're anticipating we're going to have our operating reserves be at $13.9 million. To give you an idea what that is, on our operating reserve we have in the regulations, in the act that we have a goal to keep no less than three months of operating reserve, and no more than six months.

However, in the regulations for the grain inspection program, there's a four-and-a-half month trigger to adjust the fees. So, based on $13.8, we are at approximately 4.1 months, and last year we were at 6.5 months. So, 4.1 months is what we have, we're anticipating we're going to have.

So, this is the grain and supervisory official agency account. We anticipating we're
going to be at about $3.6 million. That program needs to have about $664K for operating reserve, to be six months of operating reserve. So, we're at about approximately 27.9 months, and last year we were at 32.4 months. So, we have come down.

While the rice isn't USGSA, it is also a program that FGIS oversees, so I'm mentioning those fees. Because it does cover costs associated with FGIS. We are estimating we're going to be at $9.6 million. This program needs $2.8 million for six months of operating reserves. So, we're at approximately 20.4 months. And last year we were at 21 months.

The commodity inspection program, which is also under AMA, we're anticipating that this program, estimating it will be at a half a million dollars in the negative, which brings it, it needs to have about $2.8, I mean, it needs to have $1.4 million of operating reserves, to have six months of operating reserves. We are, right now, at approximately 2.3 months in the negative.
Last year we were almost, we were at zero months of operating reserve.

This is the percentages of how our funding is, our user fee funding obligations are broke up by category. We spend 81 percent in salary and benefits of FGIS personnel. We spend another three percent in other services, which covers items like janitorial agreements, janitorial agreements and contracted labor, training and maintenance agreements.

Rent and utilities, we have about two percent. Supplies and materials is one percent. And then, just because of the numbers, it looks like zero for equipment. We do buy equipment. We do buy, having printing. We do have transportation things, but the other categories are so much larger, they bring those down to hardly anything.

For the agency departmental overhead, you can't see my note at the bottom of the slide, the 13 percent, that covers our service agreements,
also with AFIS for our HR accounting and accounts receivable, as well as the MRP IT service agreements and departmental charges for green book, as well as our support services for AMS.

The grain appropriated account; over the last ten years we were at 20.2 for FY19. This the trend line of how our obligations and revenue have been going over the last, since 1977 through the estimation of 2019. The, but you can't see it, the red line is our appropriated funding. The blue line is our user fee obligations. And the green line is our user fee revenue in millions of dollars.

The fee reviews. So, as I explained, we have had a drop in the grain program, and we're at 6.5 months last year. This year we're anticipating to be at 4.1. We did do a five percent fee reduction January 1st of this year.

We'll be re-evaluating those fees again in November, and publishing what the fee change will be. But I won't be finalizing those until
we complete our fiscal year.

And then, we also published on March 1st the continuing suspension of the supervision and collection fees. As I mentioned, that program is at currently 27.9 months. We're suspending those through December 31st, 2020.

And before that time comes up, we will be sending out a proposal on how to implement those fees again, and what necessary formulas might be needed to make the adjustments annually.

I also wanted to mention, I don't have it on the slide, the rice proposal is in clearance on that fee reduction. Because, as I mentioned, that we were at 20.4 months of operating reserves. And we also have put together a proposals for the commodity program adjusting those fees.

But those haven't, there's four proposals. We have to meet with industry and discuss which ones they'd like to see us put out for publication for comments. So, any questions for me on the fees? Yes, John.
MR. MORGAN: Thank you, Denise. This is John Morgan. A question on the rice fees, the proposal in clearance; could you just explain that? What does that mean, in clearance?

MS. RUGGLES: Oh, it's, it's that OMB, OMB was clearing it. And that's what the last step before it goes to Federal Register for publication.

MR. MORGAN: Okay, will OMB be reaching out to the rice industry with comment, then?

MS. RUGGLES: It will be published in the Federal Register for comment for everybody.

MR. MORGAN: Any idea on timeline?

MS. RUGGLES: I hope soon. Oh, it's days, not weeks. The last update, I think, was just the end of last week we had from OMB. So, hopefully it'll be published in days.

MR. NEAL: Yes, so that, that rule hopefully we'll be seeing real soon. And it does address the reduction in fees for rice.

MS. RUGGLES: And it provides the formula for comment, as well. The AMS formula for
how we're going to annually adjust those fees for that program. Any other comments?

I do have one more thing. I have heard that the website, there was a problem with the link on where the financials are. They are published, and third quarter for FY19 is posted. It was posted yesterday. The website, I don't have it on my slides, is www.ams.usda.gov/reports/fgis-financial-data.

So, but you can get it when you're on AMS's page, you'll look up FGIS and you should find out financials. There should be a link available for you, too. But we post quarterly the status of all the accounts, the four user fee accounts.

And then we also post, in a separate section, the inspection, grain inspection, and weighing fees with the tonnage and how the tonnage fee is broken down by different categories for each field office and also headquarters, as well as the direct service, other direct services for appeals
and -- and staff program and stuff like that. All right.

CHAIR MOFFIT-TOBIN: Does anybody else on the committee have any further discussion or any questions for Denise? Does anybody in the back have any question for Denise? Okay, thank you, Denise.

MS. RUGGLES: Thanks.

MR. NEAL: Next we'll have Mr. Charles Stephens come to the microphone and, the podium, rather. And he's going to give us an update on AMS' hemp rule-making activities. We want to thank Charles for traveling from D.C. to be with us today.

MR. STEPHENS: Is it okay if I do the same thing Mr. Summers did, and shut it?

CHAIR MOFFIT-TOBIN: Yes, shut it.

MR. STEPHENS: I thank you all for inviting me here today to update you on kind of where AMS is with hemp and with the rule-making process. I'm the Associate Deputy Administrator with the Specialty Crops Program.
And we're actually in the middle of our advisory committee this week, as well. So, it's quite timely, and my boss gave me a waiver to leave and come and talk to you all. So, thank you for having me.

Right now the rule-making is going through clearance process. So, my presentation or my update may, at times, appear a little lacking in information. But because of where we are in the process, we just can't give a lot of specifics on certain items.

That being said, I do feel like there is some information I can provide, and I also wanted to just give you an update on kind of the overall hemp landscape. As you know, there's a lot of interest around the country in hemp. It has really taken up the interest of the department, government-wide in a lot of areas.

We've been meeting with agencies throughout the government, who have taken an interest in hemp, from the postal service all the
way up to, any other government you can think of has an either concern or an excitement or interest in where the hemp program is going.

So, we've been working very quickly. And with that in mind, I'd like to give you a synopsis of kind of where we are. As many of you know, the 2014 Farm Bill allowed states and institutions of higher learning to begin the process of growing hemp under research purposes.

Those provisions remain in place for 12 months. So, until this rule is out and in place, the states that were growing hemp under research purposes and higher education institutes are still doing so on an ongoing basis.

The 2018 Farm Bill was just published in December, and asked the USDA to implement a plan and a rule that was going to allow for the full production and cultivation of hemp.

Hemp was also removed and hemp seeds were also removed from the controlled substance list. It's no longer a controlled substance, and
at this time the country is primarily waiting on us to complete our regulation so they can begin to grow.

USDA is required to issue regulations and guidelines to implement a program for commercial production. The rule-making will outline provisions for the USDA to approve plans submitted by states and Native tribes for the domestic production of hemp as set forward by the Farm Bill.

It also will establish a federal plan for producers in states and territories, Native tribe territories that do not have their own USDA approved land, where hemp is still legal. So, basically, our rule is going to cover two areas.

One, any state where hemp is legal can submit a plan to us, and all the growers in that state will be licensed by the state and grow through the state. The state will handle the entire program. Then USDA is responsible for approving a state plan just to ensure that the details in
the plans conform with the Farm Bill.

So, we will review the plans that have been submitted by the states and Native tribes and then give an approval. And if there are some issues with the plans where some of the information in there may not meet the criteria of the Farm Bill, we will work with the states or the Native tribe to get the plan up to speed and to where it needs to be so it can be approved.

And then, once that happens, once the states have their approved plan, they will license their growers. And their growers, at that point in time, can begin to produce hemp.

States that do not have a plan or do not want to write their own plan, those growers, producers can submit application to USDA, and we are developing, in the same regulation, our own plan. So, we will then license the growers and then help with all the sampling and testing that will need to be done, and the compliance piece. And we'll get into a little bit more on that in
a moment.

The four main areas that all the plans have to encompass, whether it be USDA's plan or the state's, are information as to how the land is being captured. We have to be able to speak in real time to law enforcement on natural plots or the land where the hemp is being grown.

So, a mechanism to get that information from the growers to USDA which would, in turn, go to law enforcement is going to be important. Testing and sampling of THC levels, and then disposing of plants that exceed the allowable levels, all the licensing requirements and the compliance piece.

Those are the four main components that are going to go into either the state plans or the one that we're developing for those growers that do not have a state plan.

In addition to AMS, this is really a USDA-wide program, as I mentioned before. We've been working very closely with the Farm Service
Agency, The National Resource Conversation Service and Risk Management Agency because they're impacted with this, as well.

Obviously, this is a new commodity that's coming off of the controlled substance list. Farm Service Agency is very interested in implementing farm loan programs and the different types of programs that they offer. Risk Management Agency, with crop insurance, and NRCS with some of the different grants that they offer.

And so we're working with them kind of hand-in-hand to make sure that as our regulations are rolled out, that they're able to kind of join in on those regulations. That our regulations, you know, understand what their issues will be, and then we can speak collaboratively.

Over this process; this was new for all of us, and so we all had to get up to snuff and up to speed on what hemp is and what it isn't. And so, we have spent, since December, after the government shutdown was over, we literally spent
hundreds of hours and went to dozens and dozens of meetings to learn about hemp.

And to both educate ourselves, and as we are becoming educated, hopefully, educating others. And this was going on across the country. We attended state meetings. We attended Native tribal meetings.

We took calls from companies that are already producing the cannabis oils and the CBD oils that are coming from hemp. We took meetings with other groups and just anybody who was pretty much interested in this were calling us for meetings. And we tried to meet with as many people as we could.

We also held several listening sessions. In March, we held a three-hours listening session, which was online, and you can still get the audio on our website. And we had over 60 speakers call in and were able to provide some feedback on their perspective of what the rules maybe contain and maybe what they don't, and their
experience with hemp so far. It was very informative, and we had over 2,000 participants. So, this is gotten some serious legs.

We've also participated in two or three tribal listening sessions, as this is going to have a major impact on tribal lands. And so, we were reaching to them, as well, and have had several listening sessions there.

On April 18th, a Notice of Trade went out which provided guidance to producers and hemp seed exporters seeking an avenue for hemp seed exports to the U.S. So, we've been working with Customs and importing the seeds in from Canada and other places, and how to kind of free up that avenue.

And from now, we're going out with an interim-final rule, which means once the rule is published, it will be, in effect, final and our goal is to have it out this fall. And so, it will be in time for growers to take advantage of the 2020 crop year. With an interim-final we will
still receive comments just like if it was a proposed rule.

And then, once we get all the comments in, we'll analyze all the comments, kind of see how the season goes. And then, at some point, come out with a final rule and make adjustments, if needed, based on that, you know season goes and all the comments that we receive.

We are fully committed to the timeline that the Secretary has put out for us, and we've been moving as quickly as possible on this rule.

And again, as I mentioned before, the Farm Service Agency will be enacting their rules as soon as ours is out to allow for loans.

National Resource Conversation Service will be issuing guidance shortly after our rule comes out, on their programs, and Risk Management Agency on crop disaster and all the different coverages that they offer.

Some of the guidance, at this point, out recently, also spoke to Transportation. We've
had a lot of concern about transporting hemp and hemp seed across state lines. Our OGC has opined in on that, and put out some guidance a few months ago.

And, basically, gave the legal opinion that no state or tribal land can stop the transportation of hemp or prohibit the interstate of it. So, that's our position at this time, and there will, obviously, be more to come on that.

The other big piece with felony convictions. The Farm Bill specifically said individuals who have been convicted of a felony related to controlled substances will be -- will not be able to participate in the program for 10 years after conviction.

And our Office of General Counsel has stated that anyone who's growing under the 2014 Farm Bill is exempt from that, as long as the conviction took place before the Farm Bill.

Some of the other issues that we're working through, and that we hope will bring some clarity
after the rule is in place is banking. Been hearing from a lot of banks and a lot of producers that they're having trouble accessing loans and capital that's needed to start their hemp business.

Because this was a controlled substance and is just coming out, off, it is just coming off the controlled substance list, a lot of banks and financial institutions have been very leery about working with the growers.

But they've all stated their waiting on our rule to come out. So, I think once our rule comes out and they see that, okay, this is legal, you can do this, they're going to be much more willing, at that point, to open up the capital. So, I think that's going to begin to free that up.

Also seeds; USDA Plant Variety Protection Program offers intellectual property protection to hemp graders. I can't comment right now how that's going to affect -- be affected with the rule, but there will be some, probably some more guidance there, as well.
And, on the compliance procedure, the Farm Bill required an establishment of compliance. Our regulations will address this, and how we're going to roll out a compliance program.

The biggest thing right now we're working on, though, is just making sure that we have a system where all of the growers' information can be transmitted to us and then to law enforcement.

So, that way, if a law enforcement drives up on a hemp field, and hemp looks just like marijuana; you can't really tell the difference from the eye, they'll be able to go in their system and see that this is a registered hemp field. And so that will alleviate any, hopefully any legal problems that come up during the time.

And then, also our rule is working on sampling and testing protocols, and the different techniques that we're going to be using for actually pulling the samples and getting it to the labs, and the different types of labs that will be willing
to be used to test for the THC levels.

So, that's kind of a brief synopsis or overview of what we're looking at and what the rule will contain. So, at this point in time, does anyone have any questions for me, anything I could possibly answer or give you a little bit more information on it?

MR. WANTE: Mark Wante from North Dakota Farmers' Union. You mentioned the transportation a little bit. Is that in place now, or does that happen once the rule is published, as far as crossing state lines?

Mr. STEPHENS: Yeah, that's effective now. Our General Counsel opined on that. And because it's already being grown under the 2014 Farm Bill, for research purposes, the transportation of that is being taken care of now.

MR. WANTE: Okay, so that would deal with if you have a crop that you plant in one state, and you want to bring product across from another state, that should handle that even if that state
has not filed a plan?

MR. STEPHENS: That's correct.

MR. WANTE: Okay.

MR. KUHL: Ryan Kuhl, Grain Enforcement, has there been any discussion on inspection processes?

MR. STEPHENS: Not yet. Our rule does not cover inspection. It's the product of hemp. So, the inspection will have to follow after the fact. And a lot of that would depend on the industry; whether they want to have standards. And then those would have to be established and so on.

MR. TURNIPSEEDE: Brent Turnipseed, South Dakota State University. The question I have is what if law enforcement does stop this as it's being transported across the state lines, and they want to verify the THC level? Who do they send it to right now?

MR. STEPHENS: Well, right now it's kind of up in the air. There's a lot going on.
I think, in general, they've taken our guidance. And as long as you have the proper documentation that it's been tested and it was below the .3 THC level, you should be, you should be fine.

And so, I don't want to speak for law enforcement, but that's what we've been hearing. And I was just out in Kentucky a couple weeks ago, and I met with the state police, and that's what they're looking for.

Right now, they're looking for that certificate that it's under the .3. And as long as you have that certificate that it is hemp, you should be good to go. I mean, there some instances where, I don't know that there's been a case, but we're still working through that.

As you know, this is a very fluid situation. And so, just trying to get all of the law enforcement agencies on the same page is, you know, is going to take some time.

MR. TURNIPSEED: The certificate you discussed, you mentioned, how does one get that
certificate. And for anybody in the room here, is there any states that are kind of negative against this that possibly you should avoid until there are clear rules?

MR. STEPHENS: Well, I, there are a few states where it is illegal to grow hemp, and so they're not going to be submitting plans. However, there are several of those states; I think we're only at five now that are remaining.

South Dakota is three -- South Dakota is one. There's a couple in the South. But some of the ones in the South are in the process right now of going through the legislative process to get it legalized. It was just illegal because it's been illegal for all these years, and they just hadn't, their rules have caught up yet. So, they're working on that.

And so, with regards to the certificate, those would come from the labs. Once it's tested, they'll give a certificate that shows that this hemp meets the criteria.
MR. TUNNELL: This is Tom Tunnell. I was just wondering about the percent of producers or states that want to have a program. Is it more, I mean, typically is it federal? Are there more farmers accredited by the federal government rather than the states? I guess I'm not asking that question properly. But how amenable are states to setting up a program?

MR. STEPHENS: Yeah, I think I understand your question. So, at this point we don't know because we're still operating under the 2014 Farm Bill which was just research purposes. The federal government did not have a program.

So, any state that was participating in this had to have their own state land. And in the states where it was illegal, they just didn't participate in the program. To date, we've received 17 plans from states and tribal nations.

However, because we don't have regulations out, a lot of states have not submitted their plans yet. So, we're not quite sure yet what
the landscape is going to be with regards to how many states are going to manage their own program versus come under ours.

We expect to know pretty quickly after the regulation is in place. Because, again, there's several states that are just waiting to submit their plans, from what we've been told, to see what the regulation is so they can ensure that their plan is going to meet the needs. So, at this point, we're not really sure. We're just of -- we'll have to wait and see.

CHAIR MOFFIT-TOBIN: Charles, you said that so far there was no inspection protocol for hemp, correct?

MR. STEPHENS: Yes.

CHAIR MOFFIT-TOBIN: I'm going to put you on the spot. Isn't hemp and hemp seeds or oils under our list of commodities?

MR. McCLUSKEY: This is Pat McCluskey, FGIS. We have a list that goes well back into antiquity prior, certainly prior to the recent
organization. And hemp seed is on that list of commodities that are administratively assigned to FGIS.

Hemp oil and any kind of oil related to hemp is not on that list, but hemp seed is on that list. So, that was kind of my curiosity; is at this point, do you all see a, does AMS see a role for FGIS, in any way, shape or form, related to hemp seed?

MR. NEAL: I'll let Bruce answer that one.

MS. SEXTON-BOWSER: To layer on to that question, what are the methods, are there, is there any seniorization or methodology to be an official tester in the current process?

MR. SUMMERS: Okay, so first question on inspection. So, the thing to remember about AMS, right, almost, almost everything, I mean, 99.9 percent of the grading we do is voluntary. There are some instances where grading is mandatory; exported grain. There's marking orders in place...
on the borders where there's import inspection required for certain fruits and vegetables.

But for the most part, our grading is voluntary. So, if producers or processors in the hemp industry want an inspection program, they would need to come to AMS. We work, put a grade standard together, and put a program together.

Certainly I think the seed part would fit very well at FGIS. I don't know if there are quality components, because remember when we're talking about grading we're talking about quality and not, and I guess quality could become THC content.

It could be insect damage and things like that. The leaves, possibly. We'd have to work that out. That may fit there under specialty crop inspection in FGIS. But that really depends on the industry coming and saying hey, here's what we need.

Your question was on testing.

MS. SEXTON-BOWSER: So, there's
testing a THC today. What's the methodology, and can anyone be a provider of tests?

MR. SUMMERS: So, the testing for the purposes of this rule, which is the production of hemp, right? How can you produce hemp legal in the United States? Or states where it's legal is a better way to say it.

Right now DEA accredits about 1,500 labs around the country. And, so he's not here, so I think I can say it; I might be going too far. But we would expect our rule to probably tie into those existing labs that are already accredited to do the hemp testing.

But the thing about hemp is there's no field test. You can't, to your point, find a truck going down the road, you're in the state police; you can do a field test and tell if there's THC in the product, but you can't tell how much.

And we need to get to that exact level of the THC, which under the statute to be hemp has to be .3 or less. In effect, they send it to a
lab and have it go through this robust testing to get that THC level. You can only tell right now that there's THC there; you can't tell how much. It takes a sophisticated laboratory.

MS. SEXTON-BOWSER: Are there sampling requirements of a respective parcel --

MR. SUMMERS: So, the rule will, we will put out sampling and testing protocols as part of this process. And to say, Charles said it's fluid, man, oh man, I mean, we're trying very, very hard to ensure that there's a 2020 crop here because there's a ton of interest out in the country.

It's -- it's definitely touch and go. There's a lot of work to do to get this cleared through all of these different agencies who have some regulatory component to this product.

MR. KUHL: Ryan Kuhl here again. Is there a way to confirm the credibility of testing the THC level of 0.3?

MR. SUMMERS: So, we're working on that right now. What, have you been sitting in our
meetings? Yeah, because every test we know there's a margin of error, right? And I'll look to the scientists in the room, right? And so we're looking at that right now and trying to determine how to include, allow for that in the regulation. But yeah, we're learning as fast as we can because that's going to be an important component of how we craft this final rule.

MR. KUHL: So, is that where it would possibly fit under the official system?

MR. SUMMERS: Official system?

MR. KUHL: Official grain inspection system?

MR. SUMMERS: That would, that could, yes. That could, yes.

MR. McCLUSKEY: So, we have had at least one agency who has gotten a hold of us because they had asked, they had a customer ask about doing some level of hemp seed inspection. And based on how fluid this all is, my advice to the agency was maybe you want to step back from that one. Would
you say that's okay advice, or would you say no --

MR. SUMMERS: Yeah, that's good advice right now. I think, I think we're going to be cautious. We don't want to open this up to, testing right, because the difference between .3 and .4 is the destruction of the crop or being able to sell it, right?

So, the accuracy here impacts law enforcement decisions. But, you know, in some states there's been like a 40 percent failure rate. So, you can imagine; you got a 40 percent chance that you might grow that crop and because of growing conditions or the soil type, or maybe the seed you got, you may come in, 40 percent chance you're coming in too hot.

And then it's got to be disposed of. And at that point it becomes a Drug Enforcement Agency issue, not an USDA issue which that doesn't sound like fun to me. So, right now the testing that's accredited by DEA is what we're leaning
toward.

There probably would need to be some sort of accreditation process if other entities want to get into the business of testing hemp, but it's probably going to be a rigorous accreditation. Just the results here are really, really important.

MR. TURNIPSEED: Brent Turnipseed, again. I'm just asking this question because I, my lab does testing for crop group associations. And they're the ones that are going to be involved in the seed production of this.

I know North Dakota's already there, and they have a lot of concerns. So, there's going to have to further licensing with those labs that do that testing. And are you all going to be working with the crop group associations to address those concerns?

MR. SUMMERS: So, you're talking about testing the seeds?

MR. TURNIPSEED: Yes, sir, because
somebody's got to provide the seed to plant these fields from.

MR. SUMMERS: So, testing from what aspect? I'm not quite sure --

MR. TURNIPSEED: Well, they're going to have to test for THC levels on the seed. They're going to have to test for the purity analysis, the germination, the noxious-weed seed content. And, of course, if it fails it will probably go into the grain market or feed market after it's been devitalized.

MR. SUMMERS: So, all of that, and I hate to say it, needs to be determined.

MR. TURNIPSEED: Okay.

MR. SUMMERS: Once we take care of the production practices, the seed is a whole other frontier, right? For a lot of reasons, right? And from what we understand, you know, the seed is obviously one component that's going to impact the THC, but there are a lot of uncontrolled or variables out there beyond the seed that impact
that THC level. So, it's, it will be a ton of risk to start to put this, to decide to grow this crop.

MR. NEAL: This is Arthur Neal. I went right to what Bruce has shared. With the hemp seed, the hemp seed would fall, based on my reading, under the USGSA. It would probably be an AMA, Agricultural Marketing Act, type of crop and we provide that service. And we don't currently have standards for hemp under FGIS.

So, as Bruce was sharing earlier, the industry would have to come to us, work with us to develop those types of standards. So, there are a lot of questions about what all would be included in that process. For quality samples and things of that nature, I'm not sure.

You know, if there's someone trying to determine whether or not if the hemp seed crosses the line of, you know, being too high, that's one thing. I think that if someone's looking for an analysis of moisture or something like that, that's
fair, that's a fair type of service that can be provided to a company without necessarily getting involved in hemp versus marijuana issue.

But that still would be outside of FGIS because we currently have no standards for it. And until we do so, we wouldn't be able to really get our hands involved in it.

CHAIR MOFFIT-TOBIN: Charles, with all of your research and learning about it, and the quality factors that Arthur just mentioned, do you see anything that we could do, as a committee, or FGIS could research or start looking into developing standards?

MR. STEPHENS: Yeah, I think certainly. I think, especially as we get into the first season and we kind of see how all the scenes are playing out. There's some states where they've been doing this for the 2014 Farm Bill, and they're already certifying some seeds.

So, definitely touching base with those states. They provided us with quite a bit of
information; they've been good sources. And then also, you know, the other thing to remember is the seeds for hemp, depending on what type, what you're growing it for, requires different seed.

So, it's not just the seed hemp. If you're going to do the CBD oil, that's one type of seed. If you're growing it for fiber, that's another type of seed. So, it's not, it's also not going to be a one-size-fits-all.

So, I think just learning all of those components, and then deciding if you want to approach USDA to put together some standards and a program would be good.

I mean, long-term, if there are standards on the seed and there are some certification programs, that gives both the growers, as well as the financial institutions that may be investing in them, a little more certainty or more, you know, clarity, I think.

You know, and just the ability to maybe start to take more risk because, you know, they've
got some comfort level there. So, yeah, I think those are definitely things that this group would be able to work on.

CHAIR MOFFIT-TOBIN: Does the committee have any more questions or discussion points? Does anybody in the back have any questions for Charles? Go ahead.

MR. KUHL: I do have one more. I know that there is a concern because the more acres they grow of it, the more that they're going to need results of moisture. And they are starting to look where can this be done, some of the testing.

One of the tests that you mentioned, Brent, was the germination. Since an agency may test germination, what we've been told by authorities is are you starting to grow now? And so, I think that if there is maybe a process of starting the method of inspection sooner, until we end up with a bunch of product and no method of testing.

MR. NEAL: I think that's an item that
the committee can discuss. So, thank you. We didn't mean to have you standing up there sweating a little longer. Thank you. We appreciate all of the information and the insight that you shared. Thank you so much.

So, as we see now, there's a pretty robust discussion there. I'm sure there are a lot of ideas floating around in people's heads. And so, as the day goes on, I think that's something that the committee should be thinking about.

Is there a body of work that can be considered a better position the official system to provide services in a certain arrangement around hemp seed? So, saying that, we are now still ahead of schedule. I'll ask the Chair if you'd like to take a break or keep moving forward?

CHAIR MOFFIT-TOBIN: Yes, I do think we can take a break, discuss amongst each other, talk to each other. And then we'll come back here in 10 minutes.

(Off the record.)
CHAIR MOFFIT-TOBIN: There was a clarification, and to correct the record, hemp seed oil and hemp seed are both on the list of agricultural and food commodities assigned to FGIS.

Also, I just wanted to take a minute and just talk about what we just heard from Charles. Charles, again, thank you for that information. It was very helpful. I know there's a lot of interest in what you're doing.

And something that he just told me that I thought was really important was that 90 percent of the hemp that is grown is grown for oil. The other 10 percent is for fiber. So, I would like the committee to start thinking and exploring and having conversations about what we can do, or what we can recommend as far as hemp standards development.

We can talk about this and maybe we can put it on the agenda for the next meeting. But we can, you know, start talking about and have conversations about maybe a sub-committee and
researching potential quality factors or criteria that we can test for.

Just a market that we can provide some information for in evaluating and testing for those factors. And what types of equipment would be needed, along with the help of the TSE, and what tests of validation programs will we have.

So, I just wanted to committee to start thinking about what we can possibly recommend in the hemp and the hemp seed oil. We're going to have our recommendations formalized tomorrow, but if everybody wants to discuss that with a committee member, engage them.

So, all right, we'll move on to Dr. Tim Norden. He is the FGIS Chief Scientist with a Resolutions Update. Thank you, Tim.

DR. NORDEN: Thank you. So, I'm going to provide some updates from technology and science division, and these are all pretty much to address the resolutions from the 2018 advisory committee.

I do have a couple of brief ones which
I don't have slides for; brief updates that have happened just recently. So, I'd like to cover those first. So, the first is not really from a resolution, but we did give a presentation last year to the committee on a rice milling project.

And the objective or goal of that project was to evaluate the consistency of FGIS lab milling for results and compared it to commercial milling quality results. So, like head rice yield and total rice yield.

So, we entered into a contract with University of California, Davis to do that work for us. And they've been doing that. It's been a couple of crop years that they've covered. We gave an update last year that didn't give any real trends at that point.

And so now that's been completed, and we just got the report in July. And we've gone back and forth a couple of times with the researchers, trying to get clarification in the report. So, it's very close to being final, and
we expect it probably within, September 1st that that report will be finalized.

And just a couple other quick updates. So, we gave the presentation and have this resolution from the committee; it's a pretty long one here. But it's, it has to do with hardened vitreous kernels of amber color in durum wheat. And that's been, certainly, a challenge that we've had in recent years.

And we made a presentation on a new method that the board of appeals can review or what was working on about bleaching the kernels, a process to make the kernels much more easy, much easier to identify.

So, we gave that update, and we'll continue to work on that, and also on the dark, hard and vitreous kernels in hard red spring wheat. So, a similar bleaching process, presumably, would be applicable there.

But the board has done a few things. One is that they have done samples exchange the
FGIS quality assurance specialists. And the reason for doing the samples exchange is just to make sure that the board can achieve alignment with the quality assurance specialists. That's really the first step. So, they're involved in doing that.

They will also produce a visual tutorial for inspectors to use in looking at these bleached kernels and assigning them, whether their vitreous or they're not vitreous. So, they've also done that.

And then, we've also engaged ARS scientists in looking at imaging technology that's available right now in looking at those bleached kernels so that it may be something that the inspector wouldn't even have to do. You could put it and use an imaging technique and imaging technology.

So, we've engaged the ARS group, and I believe we've already had some meetings, and I believe they're coming to the board of appeals and
review next week to discuss that further with them.

And then, another quick update has to do with a part of the sense quality assurance resolution. And this was that FGIS would participate in the grain analyzer sector of the National Conference of Weights and Measures to look at this new proposal for narrowed maintenance and acceptance tolerances for moisture readers.

So, that meeting was held Tuesday of this week, and it's the meeting of the it's the grain analyzer sector meeting of the National Type Evaluation Technical Committee. So, they meet once a year. They met back in 2018, and there was a proposal at that time to, based on corn and soybean crops from Iowa, that those tolerances could be narrowed.

And so that proposal came in 2018 to the committee and then, that is the technical committee of the grain analyzer sector. And then that's gone through the National Conference of Weights and Measures specifications and tolerance
committee, and they've decided to address that and call that a developing proposal.

So, that means, I guess, is further discussion is needed. And that was January of 2019. And then, this recent meeting this week of the grain analyzer sector, discussed the issue and the members agreed that additional data is needed to address potential issues in other states where the new tolerances could have some unintended affects that might, perhaps, be too narrow. And so there is needed further discussion, further data needed.

So, the next step is that NIST plans to request additional data from the states with a goal of developing a revised proposal to be discussed in the August, 2020 meeting of the grain analyzer sector technical committee.

Any questions on those brief updates before I go further? Okay, so on to some of the bigger issues.

So, I want to provide an update on the
LED lighting work that we've done in the technology and science division. So, we have a resolution to continue doing research on appropriate LED lighting solutions that might include overhead or task lights.

So, what I'd like to do is just start from the beginning and even give you a brief results, even, from the two studies that we've done. So, now we've done two different LED lighting studies. And also, where we think we're going from here.

So, just a little bit of history. So, we've done the best we can to look into some history of lighting standards as applied to grain inspection. So, one thing that we know from the very beginning, that the light industry has recognized that daylight is the best light to distinguish colors for the human eye.

So, that's not disputed. Everyone agrees. And a lot of industry folks in the northern hemisphere decided that north-facing daylight was
best for the best daylight.

Now, what's interesting about that is what is daylight? Are we talking morning, noon, evening, sunset? I mean, clouds? Blue sky? So, early on it was recognized that there really is no such thing as daylight and meeting the standard for daylight.

And so a lot of the early research was focusing on what should that standard look like? And so that was a lot of the research. So, what does it look like wavelength by wavelength? And I'll talk about that on the next slide.

But in the 30s to the 50s that was the kind of that's the kind of research that was being done. The Agricultural Research Service, based a lot primarily on cotton research, decided that one specification that they thought was important was something called correlated color temperature of 7,500 degrees Kelvin. And I'll define that in the next slide; so it's not important here.

But in 1963 it was the first real
detailed research that was done in the grain industry. And that was done by an AMS scientist by the name of John Yateman. And he actually looked at wheat and corn. He focused primarily on wheat, and it was a very elaborate study, incredibly elaborate.

So, he had all these color tiles and inspectors had to go in there, in very controlled conditions. They had no idea what lighting was being used. And they had to put these color tiles in all different order. So, and they had to get that right.

And he actually focused, also on this correlated color temperature of 7,500, and thought that was very, very important for the lighting. And he looked at fluorescent lights, he looked at incandescent lights, and compared them to daylight.

So, what we believe, where our tolerances came from for fluorescent lights is probably this John Yateman's work. We don't have a specific time that that happened, but we saw some
memos going back and forth, even before our agency was formed in 1976.

So, those memos were back with the old grain division within the Agricultural Marketing Service. So, we believe that around 1968 was probably when those initial specifications were established.

So, why is this such a difficult problem? And I apologize for all these plots, but let me just kind of walk you through this. So, all this is is looking at the different lights, different lighting sources with a spectrometer so you're able to kind of say what the intensity of the light is based on the wavelength.

So, in the X axis you can't see that very good, but that's in nanometers and that's the wavelengths of light. And you can see a little blue bar, a little green bar and a little red bar of arrows on either side. Do you see that there?

So, that's where the human eye is sensitive to those colors.
And the human eye responds to those colors and mixtures of those colors to produce all the colors of the rainbow, okay? Take a look at that maroon curve that says daylight there. That is the daylight standard that was established.

And notice that it kind of goes up in the blue region and then it just, generally, trends downward all across the spectrum, the visual spectrum. And notice that the approved fluorescent lamp, that's that black, I think that's black curve there, it's at the very bottom. Notice how much different that is from daylight.

I mean, it's got this big spike that starts around, someplace around just past 400 nanometers. It doesn't look anything like daylight at all. I mean, there's a huge difference in the intensities as you go down through there, and then there's three spikes right in the middle.

Now, there's a spike in the green. There's one spike there that looks like it might be right in the red. So, it's very different from
the daylight. Which points to the real issue, the
crux of the issue. These spectra right here
completely define what a colored object's going
to look like based on that, on these plots.

So, two of the test lights there, those
are two of the test lights that you're going to
see in our study. Those are also different; those
are LED lights. So, they're even different from
the daylight, too.

So, this is really the crux of the
issue; is that these different artificial lights
do not look like daylight when you plot them like
this. So, that's why the lighting industry has
had such a difficult time trying to characterize
what are lights doing to distinguish color?

So, I want to talk about some
definitions now. And so, I think it's important
to talk about these details because it really gives
you some insights into how, one thing is about why
it's so difficult for us to do this. Why isn't
a light a light? Because we've heard that a lot;
like, it's a light. Why can't we just use it?

So, our specifications, in FGIS are directly towards fluorescent lights. So, and that is the correlated color temperature of 7,500 degrees Kelvin. And a color rendering index of greater than or equal to 92.

And then the illumination, which is not nearly as important because you can adjust the height of the light or the intensity of the light to get whatever you need, but the illumination is specified at 150 to 200 foot candles, anywhere in that range at the surface where you're doing the grain inspection.

So, what are these terms; correlated color temperature? Well, what that really is is what does the light source look like, on average.

So, that's all it is. And if you go into a store, you can bulbs that are anywhere from the 2,000 Kelvin all the way up to, you know, 8,000.

And what that is, 2,000 looks more yellow, 8,000 looks more blueish, and somewhere
in between is white, okay? Maybe around 5,000, maybe 6,000. 7,500 is probably a little bit blueish-white. And really, it's just an overall average of those plots that you saw.

So, all of these different specifications, correlated color temperature and color rendering index, come from those spectra that I showed on the last slide. Everything comes from that. So, the correlated color temperature is the appearance of the light source.

The color rendering index, the CRI, is about the object itself. And it's how well can the eye distinguish colors compared to daylight? Now, this color rendering index is an old index that's been out for a very long time. And it's based on eight what's called Munsell test colors. And the International Commission on Illumination has decided that that index, that old index is not very good at characterizing LED lights. And they've actually made a statement in 2015; you can find it online. It says this doesn't work
well for LED lights.

So, in other words, it's so old; it hasn't been updated in many, many years. So, a newer standard adds another seven colors to that, seven Munsell colors, to get 15 different colors, and how the human eye would react to all of those colors. So, it's much broader. And we did a lot of those measurements in the studies that we did.

So, that's what all these are, the CRI is actually a number from zero to 100, 100 being the best compared to daylight. For that specific color. Now, CRI is an average of those eight colors, so it's just an average number. So, that 92 that you see up there is an average over all of those eight different colors.

So, that's just some definition. So, you'll see this CIER value later on, and that's where we've looked at the values for 15 different colors. So, I'm just going to briefly review the 2017 study. We did present this last year to the committee.
But the way that we did this study is we used these test boxes that are, every year the board of appeals and reviews put these together, these test boxes. And what they are is an arrangement of 20 kernels. They're liners between damaged and not damaged; damaged and sound kernels.

And they covered all kinds of grains and all kinds of damages. And they're supposed to be difficult. They're training boxes. So, we selected 30 of those boxes for this initial study, and two inspectors were assigned to each light.

And they look at the 30 test boxes both in the approved lighting, down from the board or appeals and review, and that would be our approved fluorescent light. And then they get test light. And these were the test lights that were part of that study.

We had two what we call task lights, and one tube light. We tried to find as many tube lights as we could. Unfortunately, a lot of the LED tube lights have inferior specifications,
really low color temperatures and very poor color rendering indexes. So, at that time we wanted to choose the best we could.

We had another light in this study, and it was discontinued; it was a tube light, right before we started this study. So, unfortunately, we only had one LED tube light which is, of course, the most desirable because that's the most common light that's used out there in grain inspection.

We also included an office fluorescent light as a control that definitely had inferior specifications, should fail in the test. And so, in the end, you get 600 kernel evaluation for each light at 30 spectra. So, that's actually two inspectors for each light; that's actually 1,200 kernels for the final evaluation.

So, here were the results, and I need to explain this a little bit. So, the way that we did this is matches and mismatches. So, a match would be if a board member, an inspector got the same result, whether it's sound or damaged under
one light and the other light. That's a match.

It would be a mismatch if they said that it was sound under one light and damaged under another light or vice versa. So, that would be a mismatch. And you can see that the first row there is a comparison of the reference bar light to what is a consensus value.

So, the board members vote and they decide which it should be. So, if the majority of the votes say it's damaged, then it's damaged. And so that first bar there is just a baseline of this is the best we can do. And that's all done in the approved reference lighting.

And you see there's 48 mismatches. So, that's kind of a bar. That's the standard. And if you look down through there on these different test lights, you see light number three is pretty close to that. It's only 51. And, statistically, it's the same. There's no difference between a 48 and 51.

But there was a difference between 48
and 82 and 123 and 129. Do you see the control ended up being the worst, which is what we expected to see. So, unfortunately, that light ended up being a task light and not a tube light. And so not as useful because we, actually, at FGIS doesn't even have any procedures in place yet for the use of a task light.

So, where do we go from here? Well, in 2019 we did another study. We took everything that learned from the first study and did our best to design a new study that would give us results on more tube lighting.

So, what we did is we looked everywhere we could to find superior LED tubes that had halfway decide correlated color temperatures and color rendering indexes so there would be a chance of at least one of them passing.

And these are the ones that we found. We found Dazor Lighting Technology light and two from a company called Yuji International that had superior specifications. And then we had an office
light, again, for a control.

In this case, we ended up having 600 kernels for each lighting evaluation. And so each of five board of appeals members looked at six of the test boxes. Overall, that ends up, if you multiply six times five board members times 20 kernels in each box, you ended up with 600 evaluations.

So, here's the results that we ended up seeing. And we did this very differently. We tried to factor out all of, you know, concerns and learnings from our first study. We did everything in one room, a controlled room. It was a small room, but it was well controlled.

So, all the lights were installed. We did two reference light evaluations; one at the beginning and one at the end. And that's that bar there at the top there, and there were 17 mismatches. And again, that's kind of a standard by which to evaluate all the others.

But, unfortunately, when you look at
those number of mismatches, there's really no statistical difference between any of those. It is very concerning because if you look at the control light, which know that should fail; we know it's an inferior light. It's pink. It's just not any good for distinguishing color. Yet, how come there's only 23 mismatches?

So, unfortunately, and very disappointing to us, because we put a ton of work into this, we basically invalidated that study by seeing that the control light was the same as the reference light. So, to us, that completely invalidates the study. So, whatever we did in the study design was an issue.

So, what are some of the lessons we learned? And these first two had to do with this most recent study that we did. We believe that a memory affect, a subjective memory affect is very important in doing these evaluations.

In the initial evaluation, there were months that went by between the initial bar
evaluation and then their evaluation of the test lights. But in this case, we had them in the same timeframe because we were trying to get this study done as quickly as we could so we could get approved lighting available.

So, we believe that the subject memory affect was in play. That is it was too short a timeframe. They knew what the results were. And even though they tried not to, it's implanted in their minds. So, we think that's one of the key issues as why the second study failed.

Secondly, the surrounding light, the surround light, we have since found that that's a very important issue in grading and inspection rooms; is what the lights surrounding the inspection room.

We had eliminated that completely by draping black cloth in there. We had no surround light. And a little bit later in the presentation, I'll show you why that's important.

And then, in the first study we did have
this consensus, and we think that that may have made the first study a little bit too difficult in that we didn't have two separate reference lights evaluations.

We had the consensus, the voting that was the true value. And then we had each inspector, their result compared that consensus. So, that was kind of, we feel like that was a weakness in the first study. We also decided that in the second study we needed to use the same set of samples to evaluate all light sources. Not switch those boxes like we did in the first study.

And then, lastly, this is a very important one we think. Going forward, it's very difficult to link the results from test boxes to real samples. So, we really feel like in the future the best move for use to utilize real samples; maybe the same samples, but real samples, rather than the test boxes.

So, where do we go from here? Well, we did a lot of measurements of specifications.
And this might be an opportunity to go forward using these measurements that we made. And so, just to sort of tell you what you're looking at here, this is all the lights that were in the two studies.

The red, and these are all these R values I was talking about. And there's 15 different colors. It's a more updated measurement than the old color rendering of the X measurement. And these numbers are from zero to 100.

So, if at 100 you got this kind of like a circle around there. So, you can see that the approved light, the red light, is very much like a circle. It's, it's got good color rendering, so the human eye can distinguish those colors pretty well compared to daylight for nearly all of those Rs, one through 14.

Notice that in the 2017 study, which is the bar on the left, you've got some weaknesses in some of the LED bulbs. One of the LED bulbs you can see that the R9 value, which is a red color, is clear down at 20. So, that light is not too
good at distinguishing reds.

And then, if you look at the R12, that's a blue color. Those lights were not quite good at the blue. And this is a weakness of all the LED lamps. If you go down to Home Depot and buy yourself an LED lamp, you're going to see an incredible contraction of that circle, especially around the R9 and the R12.

And then, now look at the 2019 study. This is really interesting because you see one bulb does have a little bit of weakness in the R9 there, but not as much. It's there at, it's about 60 there, so it's not bad. But notice that two of the lights, B and C, are really as good, if not, and may be better than the reference light.

So this is very promising in that these lights look to be excellent compared to our approved lighting. So, what we decided is why can't we measure all of our approved lights? And perhaps we can set standards to pass an LED light based on some of these specifications, like these 15 R
values.

So, what we did is we measured, they took a lot of measurements in the National Grain Center where they actually do inspection. So, we had a domestic inspection operations office inspection lab. They also had a training room that's set up as a grading room.

And then we had a training room here, which is right over there once we turn on all of the lights. That's an, actually, officially, it's got the reference lights in it. And then we have, of course, the bar and the, one of kills and reviews inspection lab.

So, we did a lot of measurements from 2017 to 2019. We measured all of these parameters according to that color temperature, the old color rendering index value and these new R values. So, this is just, sort of tells you the measurements that we made.

And they cut the old color rendering index is the first bar on the left. And then
there's all these individual R value measurements. They're all color rendering index; how good can the eye distinguish color in all these 15 colors?

And if you take a look there, you can see that we have the minimum, a maximum and a range there of results that we got. And you can see even the approved lights have a little bit of lower R9 values, but still up there at 85. So, it's still relatively high.

And then if you look at the correlated color temperature measurements that we made, this is the really interesting thing that we, was very revealing to us. And that is that the bar, the furthest to the left bar, that's the approved light. And that's all of the NGC lights.

And you notice that they come, the average is 6,500 Kelvin. So, it's not 7,500 Kelvin; it's 6,500. So, why is that? Well, one of the reasons is that the bulbs do come down in color temperature as they're being utilized. Fluorescent bulbs do that. So, we know that that
happens.

Secondly, the surrounding lights have an impact on that correlated color temperature, also. And the way you know that, if you take a look at that study room, that's how we, that's the most recent study that we did.

And the approved lights, and that's the second bar from the left, it's labeled study room. You can see that it's above 7,500 Kelvin. And then if you put the black cloth in there, that's the third bar, it's a yellow bar, that's still the approved lights. It goes even above 8,000 as correlated color temperature. So, you can see the affect, in real grading labs, of the surrounding lights. There's a real affect there that's going on.

The last three bars are the LED lights we had in the most recent study. And so, those correlated color temperatures are not as high. We do have one of those bulbs, though, that was, you know, in the same range as that 6,500. Now,
of course, it was in the room, the study room, so it could go down some if there's surrounding lights.

So, where do we go from here? And we, you know, we really believe that this correlated color temperature is less important than these color rendering index values. But the lighting industry still places some weight on that.

And one challenge we have is the lighting industry has gone from this 7,500, they call it D75 standard, down to 6,500 as a standard. So, it's very difficult to find a commercial manufacturers that even want to manufacture that old 7,500 standard, which explained why we had difficulty finding those types of LED bulbs.

So, what's our strategy for moving forward? So, we're thinking that a good, and we believe still a conservative, strategy to go forward would be to measure, and we've done that, set minimum R survive values for all 15 of those R values. Set minimums that are basically derived from the measures from our reference lamps.
So, and then the second thing is that we need to adopt the D65 standard. So, that's, basically, a correlated color temperature of 6,500. And that's the biggest difference that we see. Right now we require 7,500, so we'd be switching to a 6,500.

So, what we think that we should do at this point is take that LED bulb that did pass everything, except that it has a little bit lower correlated color temperature, install it in one of our grading room, and do a real control pilot study to look at real samples to see if we see any shift in any damage lines or grading lines.

So, that's our plan. And that goal would be, really the focus of that is really to confirm that that shift from 7,500 Kelvin to 6,500 Kelvin is something that is okay for us to do for grain inspection.

So, if that were successful, we would set those specifications, and we would have at least one commercially available LED tube that would be
approved. So, that's kind of our strategy going forward. We continue doing some of the research that we've been doing.

   Even to look at that correlated color temperature even more closely. Because most of the LED bulbs are even in the 5,000 range. So, we would continue to do that work to see if we could lower it further.

   So, I'm going to switch gears now, so I would like to entertain any questions at this point because this is a pretty complicated subject. So, if anybody's got any questions, I'd be happy to answer them now on the LED lighting.

   MR. MORGAN: Thank you, Tim. This is John Morgan with Supreme Rice. Impressive. How stable is the LED tube industry producing these? You said you already one that was going out and you had one that you approved.

   I'm assuming that over time you would look to approve several, or have the specifications, as long as they meet the
specifications, we can use these tubes in LED. But just kind of how stable is it, and what are your findings on that?

DR. NORDEN: So, what we have seen is that the industry does not seem to want to produce the tubes at the 7,500 correlated color temperature, that 7,500. That's like a standard that appears to be an old standard that's going away.

And manufacturers don't want to spend the money to create those tubes because there's so few people and industries that want them, that want to buy them. We believe that this is a much better approach in that the D65 is a current standard by the lighting industry and there are manufacturers that are willing to do that.

But you're right, it's an niche industry. So, these manufacturers, this Yuji company, we actually had to scour the web and do a lot of market research even to find the bulbs we found. So, it was difficult.
It's difficult to find those manufacturers that are going to manufacture something that really focuses on an excellent color rendering index type product. But we think that the D65, since that is an existing standard, and manufacturers still are manufacturing to that, that will be a more viable direction to go.

But I think we need to continue to look at even lower correlated color temperatures to see if those are okay. Because most of the bulbs you find, LED bulbs are really much lower than that, even. So, I don't know if I really answered your question. I'm not sure we know.

MR. MORGAN: Well, I know it's a challenge, and all, a lot of the equipment we use and everything, to find because it is a niche; the industry testing equipment. To find the right manufacture to work with to make sure that we have, you know, what's approved can be found. And that's kind of the reason we price. Thank you.

DR. NORDEN: So, if there's no other
questions, I'll --

CHAIR MOFFIT-TOBIN: Oh, there is. You're not off the hook that easily.

DR. NORDEN: Okay.

CHAIR MOFFIT-TOBIN: I just want to thank you for your recent, I know that the LED has been on the agenda for a while, so thank you for the progress. When do you believe that the pilot program is going to be started?

DR. NORDEN: So, we're trying to start that as soon as we possibly can. We were involved in trying to order them, you know, recently. I don't think the order is quite in place yet, but, and we actually haven't set down how long it's going to be. We need to get enough samples so that we have some confidence that we hope, you know, in the coming months, in a matter of a few months, that we could have that complete.

CHAIR MOFFIT-TOBIN: Yeah, and we'd be really interested in the results of your pilot program. Is this a task light, or is it an
overhead?

DR. NORDEN: It's the overhead tube light.

CHAIR MOFFIT-TOBIN: Okay.

DR. NORDEN: So, it would be like a drop-in replacement. I mean, it could, potentially, be rewiring. But we'll, what we're focused on ordering for the grading rooms is a drop-in replacement.

CHAIR MOFFIT-TOBIN: Okay. That's good to hear, too, because I know I've talked to a lot of inspectors, and they'd much rather prefer an overhead lighting than a task light.

DR. NORDEN: Okay.

CHAIR MOFFIT-TOBIN: And, in this pilot program, and correct me if I'm wrong, or if you could clarify, you said the D65, and you said that you could down even lower. Would that be part of the pilot program, as well?

DR. NORDEN: So, what's part of the pilot program is to look at this one LED bulb that's
available that does meet the 6,500 standard. Because it's really, there's a variation of plus or minus 200 in there. So, it's actually measured to 6,300, so it would fit.

CHAIR MOFFIT-TOBIN: Yes.

DR. NORDEN: But that's the only one we know of at this point in time.

CHAIR MOFFIT-TOBIN: Okay.

DR. NORDEN: And we would hope that there would, maybe, be other manufacturers that we could find that would manufacture that bulb. We know that we've got at least one.

CHAIR MOFFIT-TOBIN: Does the committee have any more questions? Does anybody in the back have any questions about LED lighting or anything else for Tim? Tom? All right, thank you so much. I appreciate it.

DR. NORDEN: Sure, so I have a couple more updates here on resolutions.

CHAIR MOFFIT-TOBIN: Okay, I apologize.
DR. NORDEN: Not a lot more time. So, we did present some changes to the falling number program back in September, 2018, to the committee, and the committee then had two resolutions.

One was that we should implement a new barometric pressure correction and the use of a Shakematic, which we had showed removed some biases in the system and gives a much better overall alignment of our whole official inspection for falling number. And we should implement those by May 1st.

And then, secondly, to look at, to continue identifying ways to reduce test result variation. And also, to even add alternative technologies for determining the effect of alpha-amylase.

So, we have done a lot in this area. So, we have accomplished implementing these changes; that's the barometric pressure correction to sea level, and also the requirement to use a
Shakematic. So, we did a lot of hit that May 1st deadline.

We did a lot of outreach to stakeholders to notify them of the changes. We updated the FGIS falling number instructions, provided training. And you'll see on there that we also produced a training video. So, that's actually out there on our website, and can be used now. And it's a really excellent video, and gives you every step of the process.

We also did a full accuracy check of all the barometers that are being used out there. So, everyone sent theirs here to technology and science division to make sure that they were accurate, and sent them back out.

And we did make a couple of other changes at the same time. So, one of the things that we did was we find that some agencies, maybe either buy a new instrument or they've repaired their instrument, or perhaps they're doing seasonal work, so they put the instrument away, and then
they get it back out again.

Well, we decided that that's a real weakness in that we don't, we don't know what's happened to the instrument. So, we have this new validation procedure. We will send out samples, and make sure that that instrument's working okay, operating correctly. And we have some.

I think it's a number of runs that they have to make. It's not really overbearing, but it assures us that the instrument is working properly. So, we've also increased our inspection monitoring program to give more samples to make the monitoring program more statistically relevant.

So, our next steps is that we'd like to finish our literature review on alternative technologies to see where we're at right now, if there are any technologies. So, we plan to finish that in the next couple months.

And secondly, we actually continue to look for opportunities to reduce variation. And
that's really all about our national falling number quality assurance program. So, we're always looking at that program, and how instruments are doing.

We're visiting labs that have difficulties. And we looked at some, if we see some extra variation, we're looking to see what's causing that variation. In fact, that's how we ended up identifying this barometric pressure correction and the Shakematic as key issues for us.

So, we're going to continue to do that, and continue to look at these issues. So, we're looking at, we have worked with ARS on a standard reference material that would be very stable that we could send out to all companies. So, that's something we've looked at. So, we're going to continue to look at ways to decrease that variation.

So, another resolution, switch gears a little bit and talk about mycotoxins. So, we had two resolutions from the committee from last
year. First, that we identify causes and variation in mycotoxin testing and develop a plan to address these causes.

And then, secondly, to look at the issue of certifying and reporting at lower levels than are current limits of quantitation and report back.

So, for the first issue, in terms of reducing variation, we've, our group here at the technology and science division has looked at this in a very detailed way.

And we've identified these five areas that we know, we believe are significant causes of variation. So, we know that the analyst proficiency and performance is critical. We've seen issues with that. And so we know that's something we have to look at.

The second one, analytical method performance; that's really the performance of the test kits themselves. So, we believe that some of the test kits could perform better than what they are now. So, we believe that we'd like to
tighten that up.

And then, thirdly, we're using a lot of different test kits out there, okay; across official inspection. So, we use a lot of different test kits, we're going to get increased variability. So, we see this as an opportunity, perhaps, to do something different here; maybe we limit the number of test kits.

And then, insufficient, so basically quality control a the local level. We're thinking about simple things that could be done that would be some quality control at the local level that would help control results going out better.

And then, finally, we're looking at the sample drawing. We believe that if we had a finer sample drawing, we'd probably get more consistent results. So, what we've done is we've put together all these recommended changes into a report that's completed.

We're in the process now of sharing that report, internally, within FGIS. And so the next
step is to hold that GIS meeting to talk about what changes do we want to make? Which ones, what can we do? What's feasible? What makes sense to do? And then we create an implementation plan.

So, lastly, I want to talk about this certifying at lower concentrations. So, I just want to start out with a couple of definitions. So, what is the limit of quantitation? So, in the testing industry this is very well understood. And that is the lowest level of any method, it applies to test kits, where you have acceptable accuracy and precision. Acceptable and defined, actually, too. And this is part of our test kit evaluation program, this limit of quantitation.

Now, the second right now is limit of detection. So, what is that? That is the lowest level where we know that that particular mycotoxin is present in the sample with high confidence. Usually, it's 95 percent, 95 percent confident or 99 percent confident that we know it's there. But usually limit of detection, we know it's there,
but we can't assign a quantitative value. We can only say it's there.

So, these are the two terms that are really accepted by testing, the testing industry all around the world; these two definitions. Now, first that limit of quantitation is in our test kit evaluation program.

So, that is the lowest level that we included, is something called the limit of quantitation. That's the lowest level that we established where we force the manufacturers to give us the accuracy and precision. Then we bring in in-house and we test at that level, and we confirm that it can perform at that level.

We have no limit of detection in the test kit evaluation program, so we don't even have that there. So, the real question becomes how low do we need to go? If we need to go lower, you know, what might we do?

It really doesn't make, we know that below the limit of quantitation the precision and
accuracy is not as good. The variability is going to increase. In fact, it's even unknown. So, really, there's no basis for even putting a number on there because you don't know what that number is. You don't have any confidence in it.

So, that's a concern we have. If we want, if we do, if the committee believes we need to go lower on certain mycotoxins, that could be done. But we feel like the right way to do that is to change our limit of quantitation in the program, set a new criterion, and then test, and have the test kit submit data and prove that we have a good, good numbers at those lower levels.

So, if we need to go lower, we can. It could turn out that test kits can't perform at lower levels. We've seen this in some areas where at lower levels we just get erratic results.

So, it may turn out that if we really need to test at extremely low levels, we might have to use a reference method similar to what we use here at the NGC which would be LC fluorescence or
liquid chromatography, tandem mass spectrometry which requires expensive equipment and highly trained operators.

So, we leave this open for further discussion and understanding why the desire to have the lower level. That's kind of where we're at on this issue. So, at this point, I'll entertain any questions about the falling number update, and even the mycotoxin resolutions.

MR. WANTE: Mark Wante, North Dakota Farmers' Union. I want to apologize if this question is out of the scope of your answers you can give me. But when we look at the mycotoxins and potentially here where like phosphate can be tested substantially more, where did those standards come from before the EDCS started to take place?

Who calculates them? Is that the marketplace or is it just a standard? And the rationale of my question is I forever searched from many government agencies trying to find the levels
of vomitoxin where the EDCS come from.

And I spent some time at FDA and they kind of indicated that while, they test for this stuff in food, they're not seeing the levels that could cause contamination, so it seems, specifically in barley, that it's excessive. The low levels are necessary before barley will qualify for multiple standards. So, I'm curious on how that's developed.

DR. NORDEN: So, you're, are you talking about for insurance purposes or just --

MR. WANTE: No, we sell into the marketplace from a farmer perspective. You know, and I'll get these numbers wrong, but I think .01 for a vomitoxin, for example. And as soon as you get a certain level over that, I mean, basically, the grain becomes non-marketable.

So, where does that level that you're testing for to ensure that it meets some market condition; where does that level setting start?

DR. NORDEN: So, yeah, let me see if I can
take a stab at answering that question. So, we know that we have contracts between buyers and sellers. And so if there's, a seller is selling into an overseas market, there might be a contract that says that well, we don't want the vomitoxin to be higher than 2.0 part per million.

So, we know that that's a level that's important, and different countries have different levels. So in that sense, you know, it's a global market, and who you're selling to makes a difference.

So for Japan, it's 1.1, is their level that they're concerned about.

So, it's going to be a different level in these contracts for --

MR. WANTE: Okay, so that's my question. Is there any system that verifies that that number is an accurate level of acceptance? I mean, is that something that anybody works on? And my rationale to that is that if you, if you're deducting the grower for not achieving a certain level, it should be factual, based on something.
Again, it may be it's just the marketplace determines that is what they want, so that's what it is. But it almost seems that, from a farmer perspective, that there's times when those levels are somewhat un-achievable, and it's in the interest of buying at a lower price.

DR. NORDEN: So, if you're talking about the basis for those levels, it's usually health effects on animals and humans. So, the FDA sets some of those levels, and then they're set worldwide that way.

Codex Alimentarius is an organization that sets global levels for food in mycotoxins and they're very active in recent years, extremely active. And they've set recent maximum levels for vomitoxin and for fumonisins.

So, then other countries take a look at those Codex levels and they are likely to adopt them, perhaps. The EU has some very restrictive levels. So, those levels are kind of really set on a country-by-country basis.

And many of them, for example, aflatoxin
has a strong basis in science. That is that if you feed cattle at 20 part per billion corn, you're not going to see the M1, the mycotoxin in milk higher than a specific level.

So, a lot of these do have a basis in science. I know that the Codex Alimentarius has their own risk assessment body that gets involved in setting these levels.

MR. WANTE: Okay, I think that's accurate. I mean, I'm not disputing that. I was curious, though, when I looked at FDA and spent quite a bit of time on vomitoxin in barley, because that's one that gets us part of our quota substantially, and they basically said they don't even test for that.

So, we get deducted out there on the farm, and it appears like FDA is not really paying attention to that level. So it, again, it's one of these things where I think you're accurate; some of these mycotoxins are obvious. If something tells you blah, blah, blah, and you get it all.

But there's other things that we beg the
question is there anybody verifying the rationale behind the set number on some of the stuff that we're being tested for, and the levels that we have to meet to try to get to a standard where we get the full payments?

CHAIR MOFFIT-TOBIN: I don't know if this will help you at all, Mark, but I know that when we did a bunch of research when our customers started asking for information on mycotoxins and what levels are acceptable or not, and I know if you go to the FDA website, they have, you know, for young chickens for this or for that.

You know, and then behind that they have tons of research of where they came up with those numbers. I'm sure you're probably familiar with that.

MR. KERRIGAN: So, Matt Kerrigan here. So, speaking on behalf of the exporter side, a lot of your question, I know part of it is is there testing behind it? But I can say that, you know, everything that, from the exporter side that is passing through from a farmer grower to, you know, some sort of co-op,
the exporter to the end user is contractually based. And that's where a lot of that's being passed back through. Especially when it comes from a wheat perspective, which you guys see in North Dakota, obviously. Every customer in every country has a different specification.

Some of them are rounding differences, whether it be, you know, is it to one part per million; you know, is that rounded up, rounded down? Is that to, you know, 0.15, or is it just to a 0.1? And so there's all these little different variations that, depending on the contract, that have to be hit.

Some countries, we may have 200 different items that are being tested that, obviously, FGIS is not able to do on-site, and they're going to independent labs to test for afterwards, as well.

You know, I can also say that, from the customer side, there's not a lot of movement from the contracting negotiation side of it because that's what their government has requested, you know, for that country to import.
Or, you know, what the customer itself, because again, what food product that's going in. How they're using it. How they're manufacturing it down. You know, versus what the U.S. is able to provide to maybe what another country, because of growing conditions or things of that nature, what they're able to provide on the world scale, as well.

CHAIR MOFFIT-TOBIN: John, I have a question for you. I know that you brought this up, or you were interested in it. Is that still something of interest when it comes to the export markets, a lower detection level from, say, 0.0 to 0.5?

MR. LINDGREN: Well, it goes back to just what Matt was explaining. It is contractually-driven, and a lot of those contracts, I mean, Japan is very, 0.8 to 1.1 that Tim mentioned.

Just like last year when we talked about it and with speaking with Charm Sciences, to get that down would be wonderful. But liquid chromatography, because that's what we're looking at and, you know, it's not going to be, from a money standpoint, feasible.
So, if there's a way, and you know it sounds like they're still looking at the options, obviously it would be better. Because when you're trying to plan, once it's below that 0.5, you don't know if there's really any there. There's some, but what level? It's hard. It sounds like they're still working on it, but if we can get it, great; we'll just see where it ends up going with the study.

MR. MORGAN: John Morgan, Supreme Rice. We see similar issues in rice with Codex in different countries. And sometimes we're concerned it's more of a trade barrier than a true health concern. So, as a farmer, it can be difficult to understand what's going on with these different countries.

EU's particularly difficult, as well as some of the Asian countries like Taiwan and Japan and Korea can be difficult at times, as well. I mean, they're looking for ways to prevent rice from coming in under like a TRQ program.

But in regards to the mycotoxins, we're
going to cover this tomorrow with Tony Goodeman, but the MOU to FDA and NHIS doesn't even contemplate, what I've seen, any mycotoxins other than aflatoxin in it.

So, it talks about toxic substances in grain, rice and pulses and only contemplates aflatoxin. So, I don't know if that's something to address or talk about, as well.

**DR. NORDEN:** Yeah, so that's, so all of our mycotoxin testing is voluntary, except for aflatoxin at export. Everything else is voluntary. But, obviously, we do 300,000 lots of grain per year within the official system for mycotoxin testing. So, obviously, it's, people want the test. I mean, it's needed, I guess.

So, I did hear, though, that still for, particularly, blending purposes, that it would be a desire to see a lower level than .5 part per million. And I guess that's what I heard. Because we're not working on anything at this point. So, I think it's important to hear from the committee what they desire, you know, going forward.
CHAIR MOFFIT-TOBIN: And I think that's a very valid discussion point. When we were in D.C. last year we had the opportunity to go to Boston and visit Charm Sciences, and we talked to, and I see you nodding your head back there. If you could stand up.

I don't remember the two gentlemen that were the head scientists, and we talked to them about the possibility of having a test that would read from 0.0 to 0.5, and they said that that was definitely a possibility if the market was there.

So, if it's something that this committee can recommend that, you know, or can put out that Charm or other mycotoxin producers or kit producers could possibly take up this research.

MS. MUEHLBACH: Linsey, are you talking about vomitoxin tests, specifically?

CHAIR MOFFIT-TOBIN: Yes, specifically, yes.

MS. MUEHLBACH: Okay, so we already have a limit of detection going down to 0.1 ppm. So, if there's anything that needs to go lower, you know, we
can always take a look at that with Mark Tess and Kyle Putnam. So, those are the two guys who create our test kits.

So, we already have the ability to go lower than .5; it's just whether or not FGIS would approve that, recommend it.

DR. NORDEN: So, just to address that question, specifically. So, what that means, a limit of detection, what that means is that you have a confidence at .1, a high level of confidence that if you get a reading at .1 or above, that you're confident something's there.

That that, that the DON is there, vomitoxin, but it gives you no ability to state any number there. Now, I will say this; that some risk assessment bodies, including EPA and even the AMS pesticide data program, they will sometimes say that if they have a limit of quantitation and a limit of detection, they will some say, say if there's a number in between there, they'll just set it at equal, equidistance between the limit of quantitation and
limit of detection.

They'll assign a value to it. But, essentially, when you don't have, when you have something that's above the limit of detection, at the limit of detection, all you can really say about it is we have a high confidence it's there.

There's no way to put, there's no basis to put a number on there. Because we don't know the precision and accuracy. In fact, like right now we talked about typing up the variation. So, a bigger variation we, you know, monitoring program we have found is very high. Higher than we want it to be.

So, this actually will exacerbate that issue even further, if we try to go down lower. But, so we would be comfortable with saying like, okay, let's put it down to .25, but let's make it a limit of quantitation.

Let's force the testing companies to demonstrate that you give some defined precision and accuracy down there. And then we can certainly make that part of our test kit criteria.
We could also consider what to do between the limited detection and limited quantitation. We would actually need to introduce that as part of our test kit program, though. We would have to say here's how you set the limit of detection.

And we have to put that in our criteria that we want to have a new parameter called limit of detection. And there might be some way of setting a value in between there. So, that's, you know, maybe an option.

We're not too comfortable with that. I don't think our scientists are probably here too comfortable with that, but that's a possibility, too.

CHAIR MOFFIT-TOBIN: The variation, especially when it comes to vomitoxin and aflatoxin when it comes from in the field to you, that's a huge concern, when there's too much variation. And I know that we talked last year about what are the reasons for those variations.

And some of the concern on the official service provider side is that program Notice 275; I
don't know exactly what it was called. But it switched from cutting a sample down to 500 grams, mixing it thoroughly, blending for one minute to, you're going to put, grind 10 pounds.

And, mind you, when you grind 10 pounds, you're putting it into a plastic bag now that creates heat. Now, you're just dumping it out of a gallon plastic bag. So, our concern was you went from 500 grams to 1,000 grams; you doubled the sample size.

So, our concern was did that create some variation? Was there any testing done to see if there was any variation versus 500 grams to 1,000 grams? And then, do you realize that when you store that there is heat in there? So, that was a concern for us, too.

So, if they ask for a re-inspection, we go back and there might have been some contamination because of the heat.

DR. NORDEN: So --

CHAIR MOFFIT-TOBIN: So, I know I just threw a lot at you. I apologize. My main question being was there any testing when it went from a 500
gram pile sample to 1,000 grams; was there any variance there?

DR. NORDEN: Are you talking, specifically, about DON or vomitoxin?

CHAIR MOFFIT-TOBIN: That was be aflatoxin, in particular, because that would be the 10 pounds that you would have grind, and then it went to 1,000 grams in a bag shaken.

DR. NORDEN: Yeah, so that we just believe is a sound practice that we use in our own laboratory, and is used around the world. So, we, you know, we didn't do, are you talking about that it may be introduced more variation?

CHAIR MOFFIT-TOBIN: It is a little bit different because there is more variation. You know, when we talked about before you were getting 250 grams or 100 grams sent to you for the program. And we would grind 10 pounds, and then cut it down to 1,000 grams, and then pour out of that 1,000 grams, pour 50 grams onto the scale to test. So, with double the sample size, would there be variation when you double the
sample size?

DR. NORDEN: And the sample size, you're talking about this 1,000 grams?

CHAIR MOFFIT-TOBIN: Versus 500.

DR. NORDEN: Versus 500. So, no, there shouldn't be any issue there. That, I can, I may need to go back and get the details because I'm not sure I'm familiar with all the details and the changes that we made. So, I may want to talk to our folks in the lab to understand your question.

CHAIR MOFFIT-TOBIN: Yeah.

DR. NORDEN: And then I could probably give a better answer.

CHAIR MOFFIT-TOBIN: No, and that's perfectly fine. I just, we want to come up with the reasons why there's so much variation, and limit that.

So, if that was one of them? Or what are the other possibilities why is there variation in what's being done in the field versus what's being done here. Thank you.

Is there any other questions for Tim? Do
you have more updates?

DR. NORDEN: That's it.

CHAIR MOFFIT-TOBIN: Okay, why don't we take a 20-minute break, or 15 minutes. Let's do 15.

(Off the record.)

CHAIR MOFFIT-TOBIN: Karen, our Director for QACD will come and talk to us about the exceptions program.

MS. GUAGLIARDO: Good morning. Can you hear me now? All right, so before I talk about exceptions, I do have one, an update about one of the resolutions which is actually half of a resolution. Tim talked about the tolerances earlier. There's, there's the other part of the tolerances which was updating the tolerances for the SIMS, which is the Sample Information Monitoring System. And the resolution was to continue to review and update the SIMS quality assurance tolerances for moisture meters and post the results on our website.

So, we have been working on evaluating the tolerances, the SIMS tolerances, specifically for
moisture. I just want to let you know that the SIMS tolerances are tolerances where you're taking the original result and then a portion, random selection of those original results are submitted in for our SIMS monitoring. And those samples that are sent in are then the file samples. So, they are not the exact samples. So, you have a little bit of variability because you have two different portions of your sample.

And we have 90 tolerance tables. There are tolerance tables that involve factors and commodities. So, depending on what the factor and the commodity is depends on which tolerance table you use.

And for moisture, there are actually eight different tolerance tables. So, we are looking at those. We've been doing quite a bit of research on the tolerances, the history, methodology and the statistical basis behind them.

We are looking to apply more statistical, sound statistical analysis onto the data, which will allow us to strengthen the statistical basis of the tolerance tables. We recently have run across in our
research some software technology that is allowing us to make this, to aid our efforts in making them more statistically sound numbers.

But we do need some more data for some of the commodities. There are some commodities that we don't get a lot of samples for, so it's hard to, you know, run your statistical analysis when you don't have a lot of samples in your pool. So, we are analyzing, testing, and vetting the findings to, to insure the revisions are more closely aligned with our official system and the capabilities of it. So, and we'll have more updates on that in the spring. So, anybody have any questions on that before I go on to our favorite topic of exceptions?

No? All right, here we go with my page. All right, to give you a little bit of history on the exceptions. In 1994 we proposed a pilot, proposed pilot programs for exceptions. The original proposal was five different exceptions. We ended up implementing two of them and those were open season and timely service. Open season was allowing people
that had not received service to request an exception and timely service was for those who were not receiving timely service and they could go to another agency.

They're, they're original, those were the two original ones. A few late, years later, they added another exception which was barge probing, which allows any official agency to provide barge probing on any river so there's not really a boundary for barge probing. And then recently, in the farm, let's see, in the re-authorization in 2015, they added another exception, which is the written agreement where all three parties agree to have another agency provide service instead of the incumbent.

Some people will hear the terms open season and non-use of service. Those are the same thing. Originally, it was called open season and then at some point, they decided to, to make it a more descriptive name and they changed the name to non-use of service. And that's the one everybody really wants to talk about, so I'll tell you a little bit more about that.

Originally, the regulations stated that
not receiving service meant not receiving service in 180 days. In 1996, we changed that to reduce the time to 90 days and we put a provision in for a seasonal ice. A facility could ask for an exception and approval by FGIS. In the past we had criteria for evaluating whether or not we would approve that exception. Moving forward, what we want to do is, we're looking for a more formal criteria for evaluating those requests for exceptions.

In 2018, the Farm Bill in December, the day before we were furloughed for 35 days, the Farm Bill passed and made changes to the Grain Standards Act. There's two parts, I call it two parts of those changes. One part was restoring exceptions that were cancelled. There were 45 facilities that had their exceptions cancelled from the change to the USGSA in 2015. The, the companies could request their exception to be restored. They had a timeframe. That deadline was March 20th.

We received 18 eligible requests for restoration. There was one request that had three
facilities, so that made 20 facilities and all 20 of those were restored. Of the remaining 25 exceptions that were cancelled, three of those have been resolved by two companies merging or a written agreement that was put into place. So, we currently have 48 active exceptions under the non-use of service exceptions.

Somebody yesterday asked about what is that number normally? So, I went back and looked at the annual report to Congress. In 1996 was the first year that we reported it into the, in the annual report to Congress, there were 19 facilities under that exception. The highest year was in 2005. We had 107. It, and it ranged, it kind of went, it grew from the 19 in '96 all the way up to 2004 it was 104, and 2005 it was 107 and then it kind of dwindled from there. So, and now we're down to the 48.

So, where do we go now? So, the other part of the changes to the Grain Standards Act was to put back the language that was taken out in the Grain Standards Act, in the re-authorization that changed the Grain Standards Act in 2015 when they put that
language that was taken out in 2015 and put it back into the Grain Standards Act. Along with that, they added a few more provisions, one being when a designation terminates, the exception would also terminate but then the exceptions can be renewed if the designation is renewed.

So, so the, that part we have to do rule-making for. So, our plan is, we have a work plan in to do a advanced notice of proposed rule-making that would allow us to get feedback from the, from the public.

We have to make changes to the regulations before we can implement the changes to the Grain Standards Act. So, this will allow us to get feedback from the customers, from the official agencies, from the industry. What are your needs? What are your, what are the criteria that we need to implement this, to make it more, more formal in our criteria for determining those?

Little bit about how the process works. We will publish the advanced notice of proposed rule-making. We will get comments and, I think, the,
the comment period will be 30, 60, I'm not sure what the criteria is, but it will be either 30, 60 days of comment period, open comment period. All of those comments that are submitted are public comments, but we are looking for feedback from everyone.

So, pass the word. We really are looking for what should the criteria be for evaluating the exceptions, you know, what are the needs of, of the industry so that we can make good, sound decisions on how we implement the exceptions.

After we do the advanced notice of proposed rule-making, we will take those comments and then we will actually propose, we'll do a proposed rule that will also go out in the Federal Register, and that, that part is, we've taken all of the comments and we, we say, okay, this is what people are looking for. We propose to do this, to implement it this way.

This is what those regulations would say if those were the things that get implemented. This is what we propose to do. That will also have a comment period and then we will take the feedback from those
comments and then we will do the final rule, which will then make the changes to the regulations.

And I think that is about it. Any questions? I'm sure there are.

MR. NEAL: This is, this is Arthur Neal. Just want to add clarity to, since, since coming on board, I've heard a lot of questions about exceptions and boundaries and things of that nature. So, I want to clarify, too, why we're choosing the advanced notice of proposed rule-making route. There seems to be a lot of questions about terms being used, processes, decision making criteria. And if we were to go out with a proposed rule based on what FGIS knows it still may, we may lose time.

So, what we want to do is engage you in the process of understanding, getting insight on what are the key issues you want to have addressed as we clarify the exceptions requirements in the regulations; how should certain things from your perspective be defined so that we can process them as we draft a proposed rule. So, we get that input from everybody
through the advanced notice of proposed rule-making. Then we draft a proposed rule and you will see our rationale as to why we chose to develop the regulations, the proposed regulations, the way that we did based on the comments we received in the advanced notice of proposed rule-making.

So, that's why we're going that route, because we don't want to assume we know how to address this issue because it's been going on for a long time and it hasn't been addressed well. So, we want to do it right one time. That's our goal.

CHAIR MOFFIT-TOBIN: First, I'd like to ask if the committee has any discussion or comments or anything that they would like to add. Just so everybody knows, Karen and Sophie were kind enough to come and talk to the committee yesterday to help us understand the background, the history, a lot more, why is it such a hot issue today. And I want to thank you for being transparent.

And I think everybody would appreciate when you do put the language into the regulations that that's
clear, concise, and it takes out that interpretation factor that was there before, that created, that started this whole thing. So, if you could take any interpretation factors out, I'm sure everybody would be happy with that. I think I've heard, what are the rules and, I'm going to ask, what are the rules and how do we play by them? You know, so that way ---

MS. GUAGLIARDO: Yeah, rules of the game.

CHAIR MOFFIT-TOBIN: Absolutely, so, and if you could share one more thing that, for the, for everybody to hear. With the 2018 Farm Bill, it states, and if you could, I know you have it on your, where it says facilities that have not received service can choose an agency that they want. And that was big concern for a lot of agencies with their livelihood and so if you could please read that for everybody?

MS. GUAGLIARDO: Sure, so yeah, if you just read that, that part. You have to actually read a little bit before that. So, under the Grain Standards Act, Section 79, if you go by that way, it's wrongly dated -- we will go with that, in 79F2B which says
exceptions. It's a little bit, I'll skip a little bit, part of it, but it says, if the Secretary determines that the presence of more than one designated official agency in the same geographic area will not undermine the policy stated in Section 74 -- you're going to have to read that part too.

The Secretary shall allow a designated official agency to cross boundary lines to carry out inspections in another geographic area if a person requesting inspection services in that geographic area has not been receiving official inspection services from the current designated official agency for that geographic area. And that's all the part says, which is the exact same language that was taken out in 2015. It's put back in. There are two other provisions. I can read those.

One is the termination of the non-use of service exceptions. The exception under that paragraph I just read, may only be terminated if all parties to that exception jointly agree on the termination, unless terminated according to Subsection
G4(a) which says, the exception under the clauses, that I read up above, shall not apply if the designation of an official agency is terminated pursuant to paragraph one -- that part, if I'm reading the right thing, says if the designation of the official agency is renewed or restored after being terminated, the Secretary may renew or restore the exceptions under subsection-- the one I read above.

So, that is, and then they did add the same, the same kind of language under the weighing part, under the weighing authority. So, it applies not just to inspections but to weighing.

MR. KERRIGAN: Arthur --

CHAIR MOFFIT-TOBIN: So, nope, you go.

MR. KERRIGAN: -- what's your anticipated timeline for putting the advanced notice of proposed rule-making in process?

MR. NEAL: The process has started and we hope to see it out by the end of the year.

MR. KERRIGAN: So, I mean, just for this group, and we got a lot of information yesterday, a
lot of background information and, you know, I think most of us here received a lot of comments leading up to it. Some of us are a little bit newer on this. It would be my, I guess, suggestion for this group that, you know, we work on this offline a little bit. That the recommendation, you know, either be submitted individually through that process or not until the next meeting, until we've had to kind of look through that.

I don't know that, you know, unless you guys want to get into the long discussion of all the individual topics and items again, but I think it would be good to open it up to, maybe the floor if we saw some time to try and gather some more of those comments in this process. Because I think it seems like whether or not a recommendation comes from this group, really the idea here is you getting the feedback that you need for what the issues are and then how to move forward from that, if I'm not mistaken.

CHAIR MOFFIT-TOBIN: Yeah, and I can't agree more and that's one of the reasons that we asked
Karen to come and so that everybody in the room hears the same information, that there's transparency and what are your next steps, you know? Before I heard there was, we didn't know, we weren't told this. But now everybody is aware. Everybody knows what steps need to be taken, the feedback through the process that she just described. Does anybody else on that committee have anything to say before I pass?

MR. SUTHERLAND: Bruce Sutherland. I think that, I can certainly support a review of this process. I mean, it's important, though, that moving forward, these exceptions, speaking on behalf of industry, the exceptions that were granted to these companies stay in place. I wouldn't want to see that they be cancelled because of some review process in the meantime. So, I think, you know, this committee last year voted and approved the language as a group, that the motion was made and passed and voted by majority. I would not want to go backwards.

I think it's, I'm certainly all for transparency. I'm certainly all for clarification,
but I wouldn't want to see these companies lose their exception and then get into a service issue. I think it's important. Thank you.

MR. NEAL: And I appreciate your sharing that. Just from, from our perspective, working all of these things out, because the reality is that, that may be different goals from different parts of the industry. So, that's why we work all of these things out in the public through the Federal Register so we can get the input and share our perspective so that everybody knows where everybody stands on these issues.

So, our goal is to make sure that we do things as efficiently and effectively for the system as possible, for the official system as possible. Our intent of a statute at the same time get that input from you all as we work collaboratively to try to implement these procedures, or these requirements in a very smart way to facilitate the work we've got ahead of us.

CHAIR MOFFIT-TOBIN: Speaking along those
terms and looking at it impartially, I appreciate, you know, Bruce and everything that he told us yesterday.

But it was also, I think it's really important to know that, what are the reasons behind wanting to go to another agency, you know, is it price? Is it the quality of services?

And if it is the quality of services, what does, what can we do about that to, to take away that gap in the services, in the services that the official agencies provide, you know? We're looking at the criteria to get a designation and those agencies might meet those criteria that were developed how long ago, you know, but with innovation and technology, that line should always be raising.

We are a customer service based industry, so why do, why do they want to go to another agency, you know? Price is one thing, but when you talk about the division in the services that are provided because the official agencies are supposed to be providing the same, right? But we all know that we're not, you know.

So, what can FGIS do to increase, you know,
to keep up, because in the private sector, if you don't keep up with customer demand, you fail, you know. So, it's not right that the, this is probably not the right word, but the designation protects the inefficient. What can FGIS do to bump that official agency up to the services that need to be provided?

MR. NEAL: Use an example, the certificate.

CHAIR MOFFIT-TOBIN: Okay, so for example, there's certain agencies that give a live feed, or give customers access to a live feed so their voters can make better blending decisions. They see their mycotoxin results. They know exactly what to put in the next car, you know, and they can be sitting in Florida on a beach and watch their trains being loaded. The board of directors can watch.

Whatever access levels that that company wants, they can see. And it helps the loaders load grain so that they don't get hit with all the demurrage fees. They don't get a surprise, because the regulations say that the official agencies don't have
to provide a certificate until the end of the next business day.

    Well, that train's already gone. Those containers are already gone. And to get something to come back is incredibly expensive. But if they have that data in front of them, they're more efficient. And it's not fair necessarily to the industry that, that they're put at an economic disadvantage because now they have to call the agency back because now they have to off-load cars because they didn't know that they didn't meet their contract specs.

    So, the difference in what the services and the quality of services that the agencies are providing, what can FGIS do to help those agencies or what can FGIS do to provide those agencies with that same information so that industry has that data in front of them? Everybody should be, have that set.

    MR. NEAL: I wanted you to hear that Bruce is still in the room. And as, as AMS definitely deals with innovation, this gets back to that comment about innovation with 40-plus agencies out there working on
behalf of FGIS to provide this service and with customers having different needs for timely service. Capabilities may vary. And I hear your question about what can FGIS do to insure that service levels are at par so that someone's not getting, you know, 100 A-plus service and someone else is getting 75 percent service.

Because I think that may also contribute to people wanting to request exceptions and go to somebody else. Because it is having an economic impact if they have to wait for, you know, two days for a certificate or a day-and-a-half for a certificate and incur demurrage charges. So, that's something we'll need to look at and have discussions around as we figure out how to best serve an efficient system. So, I appreciate you sharing it with us.

MR. SUTHERLAND: You know, Linsey made a good point about the delivering quality and measurement of quality and reviewing that. And, you know, one thing from industry's perspective, we haven't seen, we don't know of, at least it wasn't public, a comprehensive
review of geographic boundaries of domestic official agencies in 43 years. And so, is it time for that to transpire, to review the domestic agencies, the boundaries, and also those industries within those boundaries?

A lot of consolidation has happened in industry. A lot of shipper facilities have gotten bigger to meet the grain shipping needs. I know our company, you know, six facilities out of eight are now train loaders and loading up to 100 car trains.

So, the demands on our official inspection agencies have probably increased with rapid turnaround. Qualitative, we were talking about qualitative testing issues and demands on qualitative tests, especially for monotoxin, aflatoxin, monocin, those types of things. Again, can that official agency deliver those things in the timeline we need when we're under the gun for demurrage issues on trains or satisfying the end user?

So, comprehensive sounds, you know, daunting, and, and perhaps FGIS has information already
to share with the public from a metric standpoint, but, but that's one of the things we would encourage in this process, especially when we talk about delivering service and measuring those things.

MR. KERRIGAN: And I would just like to piggyback on those comments as well about the quality and some of the metrics, you know. One of the discussion points yesterday, you know, was what kind of feedback does, does FGIS get? You know, should quality service for some of those designated agencies, you know, if things aren't going well, what are those steps that are taken formally, or informally, you know, beyond just the exception process.

Because obviously, you know, for anybody if it's a quality of service item, if one entity is not getting that, that good quality service then others may likely, you know, not be getting that as well. And what sort of feedback mechanism is there for improvement, you know, either because of the exception program or, you know, without needing to go to the exception program, as well. It is definitely a key
component to that, assuming that the boundary system is in place.

MR. NEAL: And I think that's important. If there are customer service issues that arise, I'm not sure how often you are hearing about them. So, that, that is something that we may have to do a better job of encouraging, to industry players that if there are issues that they're experiencing in the official system, that they need to let us know. And how we handle that will be very delicately, very confidentially, so that we don't disrupt or, you know, create conflicts in relationships. But we still want to try to encourage better service. So, we'll figure out how to do that in a systemic way.

CHAIR MOFFIT-TOBIN: Any more questions, discussion from the committee?

MS. GUAGLIARDO: I can say one more thing.

CHAIR MOFFIT-TOBIN: Yes, please.

MS. GUAGLIARDO: So, wait, I, I didn't talk, I talked about the exceptions and how we did that.
But we didn't talk about the designations. So, the designation process, I think, I think that you should hear that process. Before 2015, the designation term was up to three years and the changes in 2015 changed that to up to five years. But that process is, the designation ends at a particular time and we go out with the Federal Register asking for applications and any person can apply.

So, every time a designation ends, there's the opportunity to anyone, for anyone to apply. We also ask for comments on the incumbent agency, the one whose designation was, was ending. So, we do look at that and the criteria that we have to look at when we receive those applications is first that that applicant is qualified. And then if you have more than one applicant, which one is better able. And we have the criteria for that. So, we do have the, I'll call it the minimum requirements. We don't have a, an additional, you know, we have not increased that bar, if you will. There are things that have happened within the last 20 years, you know. We didn't have
a lot of on-site labs. Now, we have a lot of on-site labs.

Sophie and I went, for the last three days we've been to five agencies and most every single one of them said they're not really doing a lot of work in their main lab, because they're all out at on-site labs, because the on-site labs have really made a big difference. And when the exceptions program started, we didn't really have containers and now we have a ton of containers. And how are our agencies providing that service? But there is a process through the designation.

We actually do look at the official agencies every time their designation comes up. We actually go out and do a review of those agencies. They have additional criteria that we are updating that we started 10 years ago, that we are updating now with our quality management program. So, they are all required to do that. They're required to do internal audits every year. So, we are improving the level that they have to provide that information and service to
us. We also do, I know I talked about the SIMS a few minutes ago, and some of the things that Tim talked about earlier.

You know, there's different monitoring programs. So, there are ways for us to determine the quality of the work that the agencies are doing. But if anyone is having a problem with one of the official agencies, I need to know. We have a hot line and typically people call in. It's a, you know, if there's a violation, anybody thinks there's a violation of the Act, you can use that same number. You can call anonymously and tell us that you're having a problem and we'll check it out.

That's all I want to say.

MR. SUTHERLAND: I've got a question. Bruce Sutherland. I've got a question of the review process. So you mentioned it goes in the Federal Register. But if you're not a student or a user of the Federal Register, I mean, is it possible that the agency is up for re-designation, if that's a fair way to call it, that they be required to put out a notice
or letter to the customers that, hey, we're up for designation.

Or whether that comes from FGIS or the agency and say we're up for, you know, re-authorization or whatever you want to call it and public comments are accepted at this time, you know. It seems like this would be a, be a good way to prompt a review or at least give customers an opportunity to speak, hey, we have issues, or support the renewal or not. Again, if you're not always checking the Federal Register like some do, I know I don't, you know, a notification might be worthwhile.

MS. GUAGLIARDO: Yeah, some of, some of our official agencies do notify all their customers and, you know, saying, you know, ours is coming up, please, you know, send in comments. We do require them any time they want to make a fee change, we make them notify their customers that they're, you know, proposing a fee change.

So, we could, we could do a notice to trade, you know, there are ways that we can, I know the Federal
Register is not something that I read every day. Yeah, we could, we could work at making sure that everyone knows that those are coming up.

CHAIR MOFFIT-TOBIN: And I also think it's important to know when it comes to the criteria, whether you approve or deny an exception, what that language, what you would want that to look like, as well, you know, so what was the previous language that you used to determine? I know that there was five of them or something that you told us yesterday about.

MS. GUAGLIARDO: Yeah, I could print that out. Kendra has it, right, Kendra?

Yes, we did have a directive that we published in 2010 that had the criteria for the non-use of service exceptions and that was updated in 2017 when the non-use of service exceptions were no longer in the Grain Standards Act.

CHAIR MOFFIT-TOBIN: And I think it's important to note with that criteria being so subjective and up to who was interpreting that language, you know, that we just appreciate the clarity in the regulations
versus what comes out in the directive. So, the clearer, I just want to note what Arthur said yesterday, the clearer they can make it in the regulations, the better.

MS. GUAGLIARDO: Right, yes, so some of the criteria that we used previously was services offered, location of the specified service points, potential impact of loss of revenue by the incumbent agency, the number of approved exceptions in the incumbent's designated area, and the ability for staff to staff an on-site lab.

And these are not necessarily the criteria, or the only criteria that we could use when moving forward, you know, talking about technology, talking about the services, you know, the ability to have an on-site lab, some of those other criteria, you know, we're looking for feedback on that, on that kind of thing. You know, what is it that should be this much better, much better, I will say quantitative that we can look at would be much more helpful than the subjective ones.
MR. NEAL: Now, as a part of our process we can accept input from now directly, because you're already thinking about this issue. We don't have to wait until we put the advanced notice of proposed rule-making out to give us your thoughts on the exceptions provisions. We'd like to have that type of information as we draft the advanced notice of proposed rule-making. We don't have to do it as a committee. As Matt said, we can do it as individuals.

However, when the advanced notice of proposed rule-making does come out, it will lay out our current thinking on that issue and it will allow you an opportunity to give us feedback on our current thinking on the issue. So, that's just for your understanding of how it will come out in that, in that format. It, it may not be the proposed rule for all departments, but it would be our current thinking around issues that involve the exceptions requirements.

CHAIR MOFFIT-TOBIN: Is there any more questions or feedback?

MR. TUNNELL: I just wondered about the
three, five year re-designation and what's the criteria to go to five years? Is there some agencies just three years? Who makes that decision?

MS. GUAGLIARDO: So, the, so the law changed. Prior to 2015, the law said that the designations could not go beyond the three years. And it was changed to up to five years. So, an agency can have a designation up to five years. But that doesn't mean that they automatically get five years. We do look at the quality and some of the things that the agencies are doing as to whether or not they should get five years. We could do, you know, three years, four years, you know, two years, depending on how the agency is performing.

We do have criteria on that and we actually do have measurements. And we're updating those measurements as we go through our quality management program and look at some of the other things. We're measuring those things. In the past, we had, you know, certain thresholds for certain things, how, you know, how well they're performing on their SIMS and their
steps and things like that. And they get numbers, they get quantitative numbers on their, the reviews that we do for them. And depending on what number they come up with depends on whether or not they have the full term or a shortened term.

Another question?

MR. TUNNELL: Well, just from a user perspective, a customer perspective, if you've got an agency that's rated every three years, would that make you wonder about the quality of the service as opposed to five?

MS. GUAGLIARDO: Yes, so they still have to be qualified. So, remember the first criteria is they have to be qualified. So, they have to meet those criteria. And then we have, you know, additional measures as to whether or not, how well they're performing. So, they have to have that criteria and then, you know, like Linsey's saying, you know, there's that other additional items that we look at, how well, you know, are they participating in all of the programs that, you know, some of the programs that TSD does are
voluntary programs. Are they participating in them?

Are they doing all of the things that, most of them are supervised by DIOO, some of them aren't, but most of them are, you know, are they participating? Are they making improvements? If they send out a, what do you call those, QARs? You know, are they making those improvements? So, how are they providing, making that improvement?

MR. NEAL: I think, I think, Karen, what Tom is getting at is that there needs to be a process or some, some clarified tier about why we made decisions on whether or not, if someone's authorized to have five years, why did we give them three? Why did we give them two? And I know we may have reasons why. It's similar to the situation we have with exceptions. People want to know why. And so, that's something we can definitely talk about and figure out how we do it in a way that's consistent.

CHAIR MOFFIT-TOBIN: Any other comments, questions from the committee?
MR. LINDGREN: Karen, do you have a rough estimate on how many don't get the full five years?

MS. GUAGLIARDO: Well, I guess it's a, it's a revolving thing. So, the designations don't all end at the same time. It's a, every, you know, certain period. It used to be every quarter that there were some agencies that were, their designations were ending.

Now, that we have a gap of those two years from the three to the five, there are ones, I wouldn't know, I wouldn't say it's a large percentage that don't make the full designation. Some of them that, you know, are meeting the criteria, they are qualified but they are not doing as well as we would like them to do, so we typically will give them a little bit of time to make that improvement.

I would say the majority of them, when they, when they get to that point, they get out of the business. You know, we had 90 agencies, we're now to 42, 43, something like that. You know, they typically do it on their own before we get rid of them. So, but
I would say it would be a small, it would probably be, overall a small, a small portion don't make that full designation.

CHAIR MOFFIT-TOBIN: Any other questions or concerns from the committee? Okay, I would like to open it up to the floor to see if anybody has any comments or questions for Karen about -- do you want to come up or do you want to use the back?

MS. SEXTON-BOWSER: State your name, please.

CHAIR MOFFIT-TOBIN: Yes, if you have comments or questions, please state your name and affiliation.

MR. McCLUER: Sure, I'm Jess McCluer with the National Grain Feed Association. So, I know many of you here within the room with the AMS staff and, and those within the audience. I know some of the advisory committee members. Obviously, this is a very important issue, this exceptions issue, for our industry or for our members of the National Grain and Feed Association. We've been very involved in this
since the 2015 U.S. Grain Standards Act re-authorization and the 2018 Farm Bill, so really appreciate you bringing this issue, putting it on the agenda for this meeting.

I think having this good, open discussion about it, I think hearing about the briefing and the background, the information provided to the committee yesterday was very helpful. And appreciate FGIS coming to us and looking for our feedback as far as the advanced notice of proposed rule-making. And from the NGFA standpoint, we have provided the agency with our thoughts on some of the potential language for the advanced notice of proposed rule-making. So, we really appreciate that.

My question is, though, is, you know, we've had a lot of this discussion about, you know, we've gone back to, we've restored these exceptions that were revoked, you know. We're moving forward with this advanced notice of proposed rule-making. But the main question is, what is that, you know, what does that mean currently?
So, if you have somebody like Bruce, right, you have his facility is having a service issue and they make a request for a non-use of service exception.

If we're going through this rule-making process, what does that mean for him? What is the process, then, if he were to make a request? What's going to happen? What's the process that's going to be used? Is it, would it be granted?

I mean, I guess that's kind of the whole question we're talking about, everything, you know, moving forward. But I think as we all know from a rule-making process, I mean, an advanced notice and then a proposed rule and then a final rule. I mean, that could take some time.

But what does that mean in between if you have a facility that's going to be requesting an exception, what's going to be the process, then, for reviewing it? Is one even going to be potentially granted?

MR. NEAL: Good question. The process, well, if we did receive a request, it would be assessed,
evaluated and decided upon. The criteria, obviously, is not established. So, we have to figure out how we make a decision on that internally. We share the results of it based on what our decision was based on. But for right now, we don't have criteria in the regulations. We're going to be working on that. If we get a request, we're authorized or required to respond to the request and we will.

MR. McCLUER: So, what you're saying it's a case-by-case basis from now until there's some type of --

MR. NEAL: That's kind of what, what it's been, a case-by-case basis. So, I don't see a change. I mean, we want to, what we're going to try to do is insure consistency and fairness in our process. But every case has been a case-by-case basis from what I've understood.

MR. McCLUER: And that's, I think, some of the issues that we've had during that process, being a case-by-case basis.

MR. NEAL: Yes, and the only way we can
really address that effectively is to do things, put everything in the regulations so that we can operate in the sunshine as best as we can. I appreciate that.

MR. McCLUER: Thank you.

CHAIR MOFFIT-TOBIN: Would anybody else like to ask any questions? Okay, Karen, do you have anything else?

MS. GUAGLIARDO: No.

CHAIR MOFFIT-TOBIN: All right, thank you. All right, we are going to break for lunch until 1:00 p.m., so if everybody could be back here five minutes before 1:00 that would be appreciated. Thank you.

(Off the record.)

MR. NEAL: We've got a special guest with us again, coming from Washington, D.C., from the National Organic Program, Ms. Betsy Rakola and Mr. Matt Pavone from the National Organic Program. And they're going to talk to us a little bit about organic requirements and some of, some of the regulations that involve organic certification. We had one question that came up from the committee about are their
opportunities for AMS and FGIS to allow for organic certificate information to be included on official FGIS certificates.

And so NOP has agreed to come just to educate us about how they do things and whether there could potentially be opportunities for further exploration. So, without any further ado, I'm going to turn it over to Ms. Betsy.

MS. RAKOLA: All right, well, thank you, Arthur and Linsey. I want to thank you for inviting us here and for having the idea to start the conversation. It sounds like there are some really exciting ideas on the table, so I'm interested to see what we can offer you and how to do it together. Before I get started, does anyone know what I need to press to get the presentation on?

All right, thank you, Kendra. All right, so as I said, my name is Betsy Rakola. I am the director of the Compliance and Enforcement Unit for the National Organic Program. So, I spend a lot of my time trying to root out the problems of people who are not following
the rules. So, it's nice being in a room with people who are trying to do the right thing.

It sounds like some of the questions and ideas that we might be talking about here today will be about how we can reduce the paperwork burden to help American agriculture flow better. We are all about that. Anything we can do to make the customer experience better and provide a better level of customer service from the federal side to, to help the marketing of those products, is always our goal. So, very interested to see what we can all do together.

So, a little bit about what we want to do here today. I want to give a big picture overview of our rules and regulations without actually citing chapter and verse. And I think some of it, it sounds like may sound very familiar in terms of process and quality management. We are more process oriented and less testing oriented. Testing is a portion of what we do. So, we'll talk through kind of what that looks like.

We also have some special challenges when
it comes to organic verification in grains and commodities. So, I want to talk about, just in full disclosure, what some of those challenges are so when we think about the solutions of us working together, we also think about the possible hurdles and the risks and make sure that whatever we come up with confronts those as best we can.

But we want to start with an overview of the market to give you a little bit of idea of where that's at, talk about our system, and then go into some of the specifics. And then we wanted to wrap up our time with you talking about, you know, the future state of organic. We have some big changes that came out of the 2018 Farm Bill. And the timing is really good.

We're seeking a lot of input right now, so this is a good time for us to start the conversation and make sure that you all know ideas that are on our mind so that you can tell us what you think, submit your comments when we put some rules out, hopefully, later this fall.

So, with that, I'm going to turn it over to my colleague, Matt Pavone. Matt is here as part
of our rule writing team, so he's going to give you the market overview and then he'll take the podium again to talk about our strengthening organic enforcement rule-making. And so I will had the floor to Matt.

MR. PAVONE: Thank you, Betsy. Just a quick background note. My name is Matt Pavone. I work in D.C. I work for the Farm Service Agency, which I'm sure you all are familiar with. Spent some years as a loan officer in New Jersey, so please don't hate me. And came to D.C., worked in stakeholder engagement and now I've been with AMS for about, about three years, going into my, hopefully, fourth year. A large part of my work has been over the last several months to a year or longer, has been focused on an upcoming rule writing, which we're going to get into towards the end of the presentation.

But in terms of the big picture, without hitting you with too many Power Point slides, this is, this is a really great graphic, because it shows the past 10 years in a snapshot. And as you can see, the trend is sales have been growing in the U.S. And if
you look at NAS data and you look at the number of organic farmers, if you look at the acreage of organic farmers in the U.S., you'll also see a similar increase over time.

But if you look at import data, you'll also see another sloping, a glide path going upward, to show that we are importing more, even though we're buying more and demanding more. And the trouble is that we have very strong demand for organic products at the retail level and we have to offset some of that by importing organic products. So, this is a quick screen shot. If we keep this in mind and then look at, so this is a break out of 2018.

So, the organic market is going to be over $50 billion, the highest point it's ever been. And this is a rough estimate of where those retail sales are. So, you can see fruit and vegetables, they're pretty significant of the, of the whole pie. It also, you know, this break out also includes beverages, snacks, but we have breads and grains, 11 percent, meat and poultry, dairy, yes. So, this is just a quick
composite picture to give you some sort of context as to where the organic sales are actually occurring at the supermarket.

Now, we zoom in just a little bit further, since this is the Federal Grain Inspection Service, let's just get a quick idea based on some data that is relatively current of where the spend is, the production is, for these different commodities, milk, eggs. As you can see, it's sizable. So, you can see the dairy up there, eggs, bread, grain, meat. So if you look at this now, it might make a little sense. The numbers are big. This is from 2015. The 2018 data was the other slide, so keep that in mind.

Now, getting into just the actual commodities here of the top sellers of organic, you can see corn, hay and wheat are all in excess of $100 million in terms of sales. So, that's, that's pretty sizable and this is 2015. More current data may indicate upticks in each of those categories. And this is just very macro-level stuff. I don't want to drill down in too much detail because A, we just had lunch,
and you're probably very tired, and B, we want to keep it very user friendly for you.

Would you like to take over? Betsy's back on the mic.

MS. SEXTON-BOWSER: I have a very layman's question on hay. Is the feeding of organically produced feed stocks or forges necessary for the labeling of organic milk?

MS. RAKOLA: Yes, absolutely yes. So, you know, I think what we really can see in here, and these slides, just for clarification, are farm gate sales and what our farmers are actually getting versus the others that are the retail sales. But you can see that, you know, the livestock products are really the ones that are driving the farm gate sales.

And then, you know, I think just because specialty crops are always, you know, that higher farm gate value because they're, they're different. I think it kind of understates the importance of those feed stuffs. But yes, all organic, certified organic livestock have to eat 100 percent certified organic
livestock feed and so that is really the driver for those markets.

For people in the organic markets say that organic milk is the gateway drug to all other organic products. Certifying that and then they tend to start buying other organic products afterwards.

All right, so that's a little bit of an overview of the market. And, you know, as Matt was saying that the challenge that we have domestically is that American appetites for organic foods are just a lot higher than our appetites for growing organic foods. So, we're filling the gap with imports, but there's a real need for us to see, I think there's a lot of interest in the industry, in wholesale, in consumers. Everybody wants to buy American organic products. They just can't find as many of them as they want to. So, it's a real opportunity for the sector, for sure.

So, I'm going to talk about what does it really mean and what is that process? So, we're thinking about how we verify the integrity of that
supply chain, how we hand out those certificates. What does it look like? So, this is going to be a very quick overview. It's a complicated process. So, it will be a start of a conversation and we'll look forward to any opportunities to continue that conversation after today.

So, what does organic really mean? So, it means a whole lot of things, but at its base, this is right from our regulations. And it's a labeling term for food or other agricultural products that are produced using cultural, biological and mechanical practices that support on-farm resources, ecological balance, and conserve bio-diversity. Those are the basic ideas that are trying to underscore everything else that is organic. And then the one that we always focus on is it also means complying with all of the USDA organic regulations.

So, people will sometimes say to me, well, it is USDA organic? Or is it certified organic? Or is it organic? They're all the same. Anything that uses the word organic or any derivative of the word
organic has to comply with the rules and the first part of the rules is you have to get certified if you want to call it organic. So, we do see, particularly I think with some smaller growers, a lack of understanding. They say, well, I just said that my product is organically grown. I didn't say it was organic. Well, in the eyes of the law, it's the same thing.

So, that's a lot, a lot of what we do in my division is do some of that compliance education with small farmers to let them know what the rules of the road are and make sure that if they do want to market their product as organic, that they get certified first.

So, a lot of the organic regulations talk about what you can't do. There are a fair number of limitations on things like synthetic pesticides and fertilizers, in terms of livestock prohibitions on the use of antibiotics and synthetic growth hormones, and prohibitions on the use of sewage, sledge, or bio-solids, no irradiation and nothing that is a product of genetic engineering. And that all comes down to having a good organic plan and a robust record keeping
system.

I talked before about wanting to cut down the paperwork burden. That's the constant challenge for us is how you cut down the paperwork burden and still have the traceability and the verification that you need. So, we're always trying to, to figure out how to, to make those things work.

So, what we are, again, what we're trying to do is protect the integrity of that product. If the consumer is buying something that's organic, we want to make sure that it's delivering on that, that promise. So, we're always trying to do that in the most efficient and effective way possible. So, our mission at USDA is to do what you see on the left hand side, those four blocks. We set the organic standards. We get a lot of input from the public.

We have two federal advisory committee meetings every year. Ours are about three days long and we usually have a public webinar, a public comment webinar beforehand, you know, a lot of input from people all around the organic supply chain and the organic
community to tell us what they would like to see out of the organic regulations. So, it's a very participatory process.

We then accredit third-party organizations to do organic certification on our behalf. So, it sounds like there's a lot of similarities in the model in terms of that public/private partnership. We currently have just shy of 80 certifiers that we accredit. A little bit more than half of those are located here in the U.S. A fairly small number of those are state-run governments. Most of them are private, either for-profit or not-for-profit and close to half of them are headquartered overseas.

So, we do have a lot, because we have a need for imports to meet our market demand, we do have a lot of organic certification that happens in other countries. And so we do send our USDA auditors all over the world to make sure that we're verifying those processes and that everyone is following the same rules.

And then what comes out of that is that we have currently about 43,000 farm branches and food
processors that are certified to the USDA organic standards. And we also have a small number of government-to-government equivalency arrangements. So, for instance, the European Union has an arrangement with us where if you are E.U. certified organic, you can then export to the U.S. market and sell as organic, as well. So, the 43,000 number is actually a little bit low when you think about the total number of producers and handlers who can sell products as organic here in the U.S. That's global for USDA certified, but not for those that are certified to, to other standards.

So, the path to getting certified organic is probably what you would expect. That you -- it's first, adopt organic practices. You start farming organically. That's obviously the first thing you need to do. There is a three year transition if you have land that has had synthetic fertilizers or pesticides applied to it. That practice needs to cease, and then three years pass before you can have that first date organic certification. There's an application and a,
a fee that happens, and then an on-site inspection.

Every single farm, ranch and food processor who is certified organic must be inspected on-site at least once every year. You know, any inspection will find some questions. So, whatever issues, questions, concerns come out of that then get resolved most of the time between the applicant and the certifier. And then after that, the, the operation gets the USDA organic certificate. And the process repeats every year.

So, anyone that wants to stay certified organic has to report to their certifier and tell them any changes that they may have made in that year, especially if those changes could affect their compliance with the rules. They have to submit those annual fees, get another on-site inspection and then they get an updated certificate.

One of the challenges, I'll say since you all are familiar with the certification rules, our certificates don't have an expiration date, so it's very important to look at those certificates and make
sure that they have been issued in the past 12 months. Our regulations say that a certificate remains in effect unless or until it is surrendered, suspended, or revoked. It leaves a little bit of wiggle room, you know, in case the inspector can't get out there on time, especially a year like this where you have a lot of flooding events. It might be hard to get out there within that 12 months.

So, it kind of allows for some of that fudge room you need for the reality of what might be happening in the production cycle, but the challenge of that is that you, you don't have sort of an automatic expiration of that certificate. So, it's good to check the date, make sure that it is current.

So, our certifiers are our eyes and ears on the ground. They are the, the people in between the USDA and the farmer to make sure that the system works and verify that those organic practices are being followed. So, they're doing paper reviews. They're doing those on the ground inspections. Many of them are also doing unannounced or surprise inspections.
There is residue testing.

We require our certifiers to test at least five percent of all of their clients ever year. Those tests do focus on crops and they do focus on pesticide residues. But having said that, our certifiers have the authority to test any, any operation, any product that is certified organic. And they can also look at testing soil or livestock if they have any concerns in those areas.

Complaint investigations happen both by our certifiers and by us at the National Organic Program. That is the world that I live in is complaint investigation. And if we do find that someone who is certified is not following the rules, we start with a, a non-compliance, a correctable process. We focus on the continuous improvement, you know, as long as someone has made a mistake that they can fix, we want to give them the opportunity to do the right thing.

Now, if you billed something non-organic as organic, that's probably not something you can fix, so that's where we would take a stronger line and look
at something like suspension or revocation of the certificate.

Everyone has appeal rights. We all live under the same constitution. We all have due process. So, we do focus on alternative dispute resolution and look at mediation and settlement agreements and we encourage our accredited certifiers to do the same thing.

Any questions so far from the committee?

So, looking at the, the members here, it sounds like a lot of you are in the handling world. So, I want to talk about what does that really mean if you're not the, the grower, but instead, you're handling or processing? So, the, just like anybody else, if you wanted to get certified as a USDA organic handler, you have to apply to one of our accredited certifiers. And a lot of that in that area really does focus on the record keeping, making sure that you have traceability and anything that comes in as organic, goes out as organic, and that you have the records to prove that process.

And a lot of the ways that we verify that
is through a math balance exercise. So, did you buy enough organic product in to account for what went out as organic. Very simple. Well, it sounds simple, depending on how complex your business is, obviously, it can take some time.

Dedicated organic storage is important, or if you don't have dedicated storage, you need to have some kind of demonstration of what kind of clean out process you have. I'm not going to lie, this is a challenge when you've got dry greens, so we'll often see is something like a purge between a non-organic and an organic run to try to work through any residues that might have been there from the conventional product.

And then typically that purge starts with an organic product but any result of that purge would be sold on the conventional market. So, it's just a, a typical process that we see. It's, the regulations are very flexible and adaptable so you can figure out whatever one makes sense for the process that you're looking at.

Labels do need to be approved by an organic
certifier. So, I think when we're thinking about organic claims on a certificate, you want to think about that certifier approval. Generally, you're thinking about the retail label here. We don't currently require organic certifier approval for bulk containers, but Matt will talk about how that may be changing in the near future. That's one area we'd love your comments on and definitely ask you to start thinking about as we get ready to propose some changes to our rules.

And another area that may come up as you're thinking about your processing facility is that there are some restrictions on sanitizers or cleansers that can be used, really just on surfaces that contact the organic product.

Again, a fair amount of questions about funding and how the fees work for organic. It is very much a public/private partnership, while there are a whole host of USDA programs in farm service agency, the conservation programs -- are certainly adaptable and, in some cases, tailored to organic, the certification process itself is very much privatized. So, the USDA
accredits our certifiers. The certifiers have to pay the USDA a fee for that accreditation and then pay our auditors to conduct the audits. Farms, ranches and food processors then pay the certifier to get their organic certificates.

Inspectors will work for the certifiers. They are both full-time and contract employees. We have a -- a good mix out there. And so the only funds that actually flow from the USDA to that organic certification system is through our cost share program. And that's limited to 75 percent of the certification fees every year, and it's also capped at $750 a year for each scope of certification. So, if you've got crops and livestock, you could get $750 each. So, it's, you know, capped at that level to really benefit the, the small operations that need it the most.

So, I talked about our certificates. I wanted to show an example of what one looks like. This is specifically what we hope the future of organic certificates will look like. So, we are piloting what's called a -- what we are calling a federated organic
certificate. I mentioned we have almost 80 certifiers.

So, that means if you're trying to figure out whether you have a legitimate certificate, you'd have to know what format all 80 of them used and that can be a challenge. And it can be an area where it just becomes a little bit too easy to falsify that certificate.

So, we have an online data base. This is our organic integrity data base where all of our certified farm, ranches and food processors have a specific record. They all have a specific numeric ID. This is the consolidated screen so you can't see all of that level of detail, but everyone who has an entry in here soon will be able to log in and get a, a real time federated certificate. So, you can see that it's got a QR code there.

Our hope is that once we are able to roll out this technology, that will give anyone who is trying to verify that organic certificate the ability to very quickly, you know, use a smart phone or any other QR-enabled device, get online to our data base and know
for certain that they have an updated, real time certificate, not something that has been falsified, not something that has been suspended or revoked, and have that confidence in the product. So, that's another area that is coming soon that we'll be asking for comments on. So, if you're a data or software person, we'd love to hear from you about this idea.

All right, any questions on any of that before I move on to, yes?

MR. WANTE: Excuse me. Mark Wante from the Farmers Union. So, in looking at the imports, you said you have countries that have standards that you allow them to import and then you have verifiers. But do those standards then meet or exceed our current levels?

MS. RAKOLA: Great question. Yeah, so the standards for countries that we recognize are generally, we call them equivalency arrangements because they're not equal, but they are functionally equivalent. If there are exceptions that seem really critical, that we can't reconcile, we'll carve those out. We just call them critical variants. So, one example would be
antibiotic use. Some, some of our trading partners will allow a 12 month withdrawal of the animal after antibiotic use and then allow that animal to come back into the organic market. Our regulations don't have that exception. So, that would be one of the critical variances that we'd carve out.

So, our current equivalency arrangements are limited to Canada, European Union, Japan, Korea, and Switzerland. And in the Asian markets, they're also limited in scope, so we don't cover all crops. We may just cover crops or livestock. Processed products, I think, are under negotiation in some of those areas.

MR. WANTE: Yeah, I have a deep concern about truth in labeling. It's one of the things that we want to, you know, from the farmer perspective, that want to get accurate. It appears to me that right now if you look at the organic standards are the only ones really probably truly achieving near-perfect, you know, compliance. A lot of the other claims are a little bit messy as far as we can tell. But just to mention to you, from a farmer perspective, I'm not sure it's a bad
thing that we're short in supply of organics. That might not be a bad thing, because that's what keeps that premium.

MS. RAKOLA: Yes, that is very, very true. I see another hand.

MR. MORGAN: I have a couple questions, but the first one -- it's John Morgan with Supreme Rice. The first question on the imports, Mark, do you guys, you talked about testing, audits, surprise audits, do you do any of that on the imports?

MS. RAKOLA: Great question. So, the testing on imports, we rely on the FDA system. And so when the FDA does their testing on imports, which I think is the, the typical control level on imports where it generally is about two percent. If they do testing on an organic product and they get a positive hit, they will send that to us and then we'll investigate to find the source of the, of the pesticide.

MR. MORGAN: Thank you. Regarding the -- you said you have 80 organic certifiers. I guess these are independents that you guys have approved.
MS. RAKOLA: Right.

MR. MORGAN: Are they also consultants to help a company who wants to go organic or a processor from an organic processing facility? Who do we turn to, to help us ensure that's a, we can meet the standards?

MS. RAKOLA: Yeah, so our certifiers, some of them also have a consulting or a technical assistance side of the house. The challenge for them is that they also have to have a really good policy to separate conflict of interest. So, someone who's inspecting a farm can't also be consulting for the farm. That makes them wear two hats that are just really difficult to balance. So, several of the certifiers do have a separate educational or technical assistance arm, so if you are looking to get certified, that's a good thing to look for in deciding who you're going to work with.

And there are organic consulting firms. I think one of them is actually called the Organic Consulting Firm, not an endorsement, just the one that's easy to remember. But there are certainly organic
consultants out there who can help to set up the system and help you figure out what you need to do to get the process running.

MR. MORGAN: Do you guys have parameters on your website by, say by industry or by product to say the way it meets organic?

MS. RAKOLA: We have, we have definitely a whole host of fact sheets and other materials there. It won't be quite as, you know, we don't have a how you set up a plan to become an organic processor, but we do have a whole host of training materials that are up on our website. We've actually just launched what's called our Organic Integrity Learning Center.

So, we have a lot of self-paced training modules that will take you through the process of how you would get certified, what it means, what, how, how to find an organic certifier, all that sort of thing. So, we can follow-up and share that information for how to get to that Learning Center and that would be a great place to start. The Organic Integrity Learning Center.
MR. PAVONE: We're going to be here this evening, as well, so if there's additional questions we're happy to, in the in-between moments, to, to address all the questions that are specific. Very good questions.

MS. RAKOLA: So, let me move on to the enforcement portion of the program. So, when you think about our system or are thinking about organic control systems; the certifiers that we have; traceability so that that worldwide supply chain, import or domestic, has integrity; robust enforcement, so everyone is playing by the same rules; and transparency in how we are creating our standards.

So, again, my world is in the enforcement world. I'm going to talk a little bit about that and a little bit about the specific areas that are a, a bit concerning in what we're seeing in the great world today.

So, we do open investigations based on complaints that we get. Anyone who suspects that someone's breaking the organic rules can send a
complaint and we will take a look at it and see if there's something that, that we need to take action on. And we also do surveillance. So, that more and more, we're trying to focus on areas of highest risk.

So, we're directing our resources to the places that have a big impact on the markets so that the market is fair for all American producers who want to participate in it. So, we are doing more and more surveillance and choosing the areas that we think need some extra attention.

We do coordinate with other federal agencies. We have more and more been coordinating with the Inspector General and Department of Justice for enforcement on a large scale. And biggest areas of concern for us right now are import oversight, compliance by organic dairies, and unfortunately, grain and oil seed. We are thinking about how we can work together. This has been a bit of an area of concern for us.

So, to just, you know, think about what those risks might be and how we could, could overcome
them together. In grains it is all about traceability, being able to trace that product all the way back to a certified farm. Anyone who does make an organic claim then would have to be able to prove, if they're asked, that their product was actually organic. And we do have the ability to levy civil penalties, so a little bit of a cautionary note there. We don't want anyone to suffer any of this, so we all want to figure out how we can bring integrity to, to our various systems.

So, we are in the news a little bit more these days than we might like. Full disclosure for anyone who reads the Minneapolis Star Tribune, there is a story just coming out today about some concerns that people have shared about organic grains coming in from Argentina. A look at the, the news in the coming days, we have had some concerns about domestic farmers also committing some fraud in organic commodities and are expecting some, some additional news on that shortly.

So, you know, there are just some special concerns when it comes to trying to have full farm to
traceability in bulk commodities that are traded in, in large silos and just have a long shelf life, and you know, a little bit of back and forth with the caterpillar. It's just a, it's an area that's been really, really tough for us. And because there is that shortage, there's a big price premium. It's just an area where there is that incentive.

So, everything that we are thinking about, and perhaps you could help us do better, is how do we try to work with the existing system and overlay that, that traceability from farm to table? What are the controls that we're not putting in place today that maybe we could put in place tomorrow to help us all just verify that integrity a whole lot better?

So, you know, going back to some of the, the rules for, for organic and thinking about, you know, what might be that plan if you wanted to get yourself certified organic as a processor, you know, it's really important to have those dedicated organic, organic storage sites, have really good record keeping and product tracking systems. And a lot of it comes down
to how are you training your employees? Especially some of the areas where we've seen things kind of start to, to fall apart. You know, growth is wonderful and growth can bring its new risks. So, if you have a really well functioning system, it grows really quickly. Do those controls that you have over the system and your employees understanding scale up with that.

Transportation becomes a, a pretty big issue, as well. Making sure that you're working with transporters that you can trust who are doing proper clean outs, dedicating that equipment to the organic supplies. And then also, you know, again, just checking on that certificate. We do also see people start to get comfortable with suppliers.

Some, you buy from the same person month in and month out and then they do something wrong. They lose their organic certificate. They could have some inventory they're trying to pass off and so, you know, they come to you the month after they actually got suspended, don't disclose that to you. You know, we've seen people get taken advantage of, just, you know, you
get comfortable with those relationships. You start to, to ease up on the verification. So, just keeping all of those controls in place and keeping them really consistent is important.

All right, so that's all the bad stuff. Let's talk about the good stuff. So, the, I mentioned earlier that there are some changes coming down the pike in the Farm Bill. We were really pleased that the Congress gave us the tools that we need in the 2018 Farm Bill to start confronting some of these challenges. So, we got more funding to try to have better security and more scrutiny of organic imports.

And we also have a requirement to reduce what is called our exemption. We have a current rule in place that exempts anybody from organic certification that doesn't physically touch the product. And that's become a challenge for us. And that's an area where I think you all might have a unique perspective.

So, you know, if you think about our law was written back in 1990. Our regulation was put in place in 2002. The market was really small, okay. You
only talked to people who were writing the law and they were all, well, they said, you know, we're just trying to think about a system to reward people who are doing the right thing. Supply chains were really short. You know, there was not a whole lot of steps in between that farm to market. And today, with $52 billion in retail sales, there's a whole lot of hands in between that farm to market.

So, you know, we think the intention in the past was, well, if someone's not touching the product, you know, they're not changing what happens to the product, they don't need to be certified, because it doesn't really have that impact. And today when we have just a much bigger market with longer supply chains, so many more transactions in the middle, it's become a real challenge to have that exemption to certification.

And a lot of the people who really can trace that integrity of the product through the market tell us something like, did it get fumigated when it crossed a border? That fumigation would mean it no longer gets
to be organic. A lot of those folks actually aren't part of the organic certification system. So, Congress told us you have to change that. And we think that that makes a whole lot of sense. And so that's something that we will be proposing to implement through a new regulation in the coming months.

So, the two main areas for this are data sharing with Customs and Border Protection. This really deals with product incoming, import certificates, trying to make all of our certificates have an electronic component. And integrating with the systems that are already in place. So, if any of you work within the ACE system, we're adding our organic data to that and sometime in the next couple of years we'll be mandating that for all imports so that we really know what's coming across our borders.

And the piece we'd like to focus on in our conversation with you today is our strengthening organic enforcement rule. So, that rule will require an electronic import certificate and will also do a lot to improve that supply chain traceability, particularly
by requiring certification from those brokers and traders who right now aren't within that organic oversight system.

So, I have mentioned a couple of times electronic certificates. We are working towards the import certificates in the proposed rule. We did launch electronic export certificates earlier this year through the ETDE system that AMS has. And through that federated certificate, we are also working toward the electronic real time version of the regular annual organic certificate.

There was a big focus, even in the legislation, on technology. We really think that the future of all of this for us is data driven. It is going to be software driven. With this many players in the market, this many countries participating in the market, we really need to have software solutions to give us the traceability that we need. We don't exactly know what that is going to look like, but there are a lot of conversations happening right now around blockchain and the applications that that could have for the organic
And with that, I'm going to turn it over to Matt to talk more in specifics as our subject matter expert here about what our strengthening organic enforcement rule will propose and the kind of things where we would love to hear your comments.

MR. PAVONE: Thank you, Betsy. So, as Betsy mentioned, the Farm Bill for 2018 has charged the USDA with really improving the oversight of the supply chain, of the organic supply chain. So, when you hear things like data integration, transparency, it has a, it has a statutory source to it. And so we're in the process, we've been in the process for over a year now, reaching out to stakeholders, talking with them, listening, and developing topic areas that we feel are important to them and then have the might of the Farm Bill.

And we've developed what is expected to publish at some point in the fall of 2019, what is technically called the strengthening organic enforcement rule. It's a proposed rule, so there's
going to be opportunity thereafter, about 60 days to submit public comment. We're hoping that you, among others, will be interested in reading it, learning about it, understanding it, looking at the economic analysis and then sending us your comments and suggestions. It would be helpful for us, always, as regulators, to be better informed. And I think it's a, it's a good process to be a part of.

So, we've talked about the demand. We've talked about the size of the sales in the U.S. and just additional information, globally it's about $100 billion in sales. Just happens to be about half. So, it's really a, this is really a fast growing market.

The affected businesses, based on the way the proposed rule is made, we're going to affect three different types of operations.

First, those who are certified. They're pretty aware of this because they're certified operations and they subscribe to the Organic Insider.

Now, this is a free service that we provide, so I would encourage each of you, if you're interested in learning
more and staying up-to-date, go to the website and put your e-mail in for the Organic Insider. It's great information. It's fairly routinely released, every month or so, and it's a good place to be plugged into. Costs nothing and it's high value. So, we have the organic producers and handlers and they know about this.

And the certifying agents, roughly 80 you said, right? Just under 80? We also have these handlers that are just beyond the current statutory and regulatory reach. And this gets into the world of brokers and traders, both domestic based, domestic focused, domestic sourcing, as well as those who are importing from overseas. So, it's a big tent idea.

And these, these individuals, some of you may be in the room, are folks that we want to get into the discussion with and hear from. So, these three types of businesses are going to be directly affected by this proposed rule-making were it to continue marching forward in its current state and get published.

So, I mentioned the publication date is
anticipated in the fall. We have about 60 days of public comment thereafter. And as part of rule-making, we receive the comments. We review and assess them. And we make decisions based on them. And then we go into final rule-making. So, if you think it might affect you, please read it. We encourage it. If, if you're convinced it's going to affect you, read it. Give us your comments.

The most helpful comments we find, as a matter of course, is not to just send in a very basic yes or no. Point out what the concern is. Describe how it's going to impact your business or even how you feel it will impact your industry. Provide a solution.

If you have data, throw it in. Sometimes the comments we get, we, we find ourselves asking a little bit more than the comment provided. The most informative comments are holistic. So, we strongly encourage that from any stakeholder.

These are going to be submitted, this is the normal course of business, through regs.gov. They're all publicly available. So, what you submit
will be viewable and accessible to anyone who wants to go to that website and read the comments.

So, in terms of, in terms of expectations about the actual rule, it's, and I want to leave a few minutes for questions, it's going to focus on traceability in the supply chain. And one of the most important places where we find that we don't have the ability and the authority yet to certify and examine and prod, is in that market facilitator. So, along the supply chain, we can deal with producers quite proficiently and we can deal with the retailer quite well. It's the in-between that we're trying to get a good read on.

And the strengthening organic enforcement proposed rule will posture us to do that so that you can be a trusted buyer and a seller, and that's key. This is going to help strengthen the supply chain and it's going to make the consumer at the very end believe in the product even more and really set the standard for us, that elevates everything we do. So, it's a, it's a really a win-win-win for everyone. I don't want
to, we have until 2:00, I believe, right, so please, questions or comments? I guess the floor is now open.

MS. RAKOLA: I also just want to add, as I mentioned, this is a proposed rule for us to work with people we've never worked with before. So, if you read through this and say, you know, you guys have kind of missed something, we want to hear about it. We don't know what we don't know because we're trying to work with a, a segment of the supply chain that isn't currently a part of our oversight system. So, tell us what we need to tweak. Tell us what we need to fix.

We've even found, as we're talking about brokers and traders that people use those words differently than we do and so we're trying to figure out what it is we need to change. But I want to open it up to you all to hear, you know, what interest do you have in, in the organic program and how would you like to see us working better with, with your industry?

MR. MORGAN: This is John with Supreme Rice. You said you work, now working with a segment
of the industry you hadn't worked with before. Is that
the importers, I'm just guessing?

MS. RAKOLA: Yeah, so importers would be
part of the, I think the most, one of the most concrete
examples we've heard of are those like customs brokers
and freight forwarders. So, often the people that are
getting things like the manifests of an importer are
not necessarily required to be certified and then that's
really, really important data to know if, if you have
that, that traceability of the product. So, so that's
one example. We also assume that there are people who
are doing brokering and trading just domestically, that
it will also be impacted and that would be important
to be a part of that certification system.

MR. MORGAN: So, if you're a, just a broker,
you've never touched the grain, you would still be
required to be certified organic. Is that right?

MS. RAKOLA: If you are brokering, yeah,
anyone who is brokering, selling, or trading in the
future will be required to be certified.

MR. MORGAN: What about trucks?
MS. RAKOLA: So, transportation will have its own exceptions. I think it's sort of like we don't currently require retail to be certified because it's just not feasible in a lot of ways. Transportation will still have its own carve outs. The responsibility then fall on the person who is receiving to verify that that transportation service maintained the integrity of the product from the time that it was shipped to the time that it was received. And there's things like truck clean outs and other things that are generally required for that.

MR. MORGAN: Once it's packaged, is it considered final, even if it's being transported? Or is it still you have to maintain that from, say, a processor to warehouse to a grocery store?

MS. RAKOLA: Yeah, generally until it gets to the point of retail, anybody who would be participating in that would need to get certified.

MR. PAVONE: To, to add a little more texture to that, so currently there are brokers and importers that are certified. Remember, we are an
opt-in program. So, it's voluntary. And the, if you're a farmer who wants to sell organically, you have to get certified. If you're on the market and lately your product is organic.

But we don't have that same requirement for, let's say, the broker. So, some brokers have taken it upon themselves to say, I want to be certified organic because I want my buyers to know that they can really trust that the product that I'm getting, because I'm exposing myself voluntarily to audit. So, there is, there are importers and brokers that currently do have certification, but the proposed rule because of the Farm Bill, is getting to that requirement. Now, it's going to be a standard.

So, we are cognizant of the fact that the supply chain is long and complex and, and especially when you talk about imports, there's dozens of actors along that journey from farm to table, handling it, not handling it, paper transactions. It is not our intent to hurt an industry. We've actually done a pretty good job, I think, if I may say, in trying to mitigate as
much of the cost as possible and focus on the actors that we think the liability exists in.

And so transportation is, is a great question. We've talked about this for a long time. And it is not our intent to require anyone transporting a finished, sealed product to be certified because the cost would be prohibitive and the oversight would be very difficult. So, I don't want to give you any false indications. So, if you're in transport, probably not going to be in that proposal.

MR. WANTE: Mark Wante, North Dakota Farmers Union. So, in the, in the non-GMO world we export out to other countries. We typically seal the containers. And that's somewhat of a grave concern with at the port the seals being opened for testing. Are you doing sealed stuff coming in from the imports? Or, and then is there, you know, what's the risk of contamination if those containers were opened or whatever?

MS. RAKOLA: Yes, this is, this is in an area where we have specific requirements in the
regulations. However, I think sealed is often the best practice. One of the challenges that we have had and one of the areas where I think Arthur and I have said maybe we can all figure out a way to work together better, our certifiers are private entities. They can't always get to the port. And so they are, even if they wanted to, and this is a once a year certification, so it's not every time a ship or a truck arrives, right?

So, even if our certifiers are interested in being on-site when a product is unsealed, often because they're a private entity, they don't have the ability to get onto the grounds of the port and to witness that event. So, if there are ways that we can all, you know, if there are people who have those eyes and ears on the ground and we can figure out a way to build that bridge to the organic certification system, I think that would be very helpful. And some of our trading partners are testing our exports quite frequently and they do a lot of work to try to negotiate reasonable residue tolerances. More and more success as time goes by, but it is an ongoing challenge.
MR. PAVONE: And as you bring up a really great point, actually both of you, there's so many different routes through a supply chain. We have the intention, not to just drop a rule on the walkway. We're going to actually be programming in meetings over the duration of this process moving forward. Can't give dates, but we intend to provide focused sessions for these type of questions to be asked in, because we want to give you the certainty that you need to make business decisions. And it's going to be a holistic outreach campaign.

So, I encourage you to get on the Organic Insider. Stay tuned with what's coming. When the rule is published in the Federal Register, go read it. Talk to your colleagues. We're going to separately, but simultaneously, publish the grain flex analysis, so for all of you econ-heads out there, this is going to be for you. You can read about how we project costs and that will be on our web page. So, you can read that, as well as what the rule is going to state and then submit your comment and, and we'll, we'll review all of those.
CHAIR MOFFIT-TOBIN: I have a question. As far as, you know, like, the export locations or anywhere domestically, do you see it as an additional service that FGIS and/or other official agencies could do as far as being certifying agents? Would that be any kind of a partnership?

MS. RAKOLA: That's a really interesting question and something that we should all explore further. I think we want to, I'll be honest, I'm, I'm a little bit in the dark. I don't think I know enough about what you all do to answer that question intelligently. But I think, it sounds like from the little I understand, that there could be the possibility of being a certified agent or a certified operation that would allow you to, to do those activities. So, I think it's a, it's a great idea and something that we should definitely explore further.

CHAIR MOFFIT-TOBIN: You know, as we, all of our AMS, we're looking for different collaboration ideas, you know, and if it's a new line of business that FGIS or official agencies could offer, you know, it's
something that we could definitely look into. The committee could recommend possibly looking into.

MS. RAKOLA: Absolutely.

CHAIR MOFFIT-TOBIN: Is there any further questions or comments from the committee? I do have one more statement and I just want to thank you two so much for coming here today and explaining what you do. And it's so much in line with what we do, you know, as far as certification and verification and processes in place to insure the integrity is there. So, what we initially asked for, you know, was you guys do all the work. NOP does all the work to make sure that that is certified organic. And so what we were asking was if you guys do all the work to insure that it's organic, can we adopt that and collect your paperwork or documentation and put that on a USDA certificate?

For example, you know, if we collected all the documentation from you, we could actually put U.S. number two organic yellow corn. We have a similar partnership with APHIS that we do the work on the ground to make sure that they can issue that 921. So, we give
them all the paperwork and then they issue the 921 for the exports. So, we have a similar relationship with APHIS.

So, we were wondering, well, could we take that, you know, could we take that a step further and take all of your documentation because you did all the work, and then put that on our certificate. We have a, a customer that is certified organic. He's a handler. So, he transports a lot of organic grain. He's said that that would give him a huge economic advantage over some of his competition using FGIS and NOP.

MS. RAKOLA: Yeah, absolutely, I think that's a really interesting idea that seems like it has a lot of promise. And we look forward to exploring it more.

CHAIR MOFFIT-TOBIN: Thank you. Is there any questions or comments from anybody else? Go ahead. Will you get a microphone, and you have to hold it, okay.

MR. NEAL: Yeah, for the court reporter.
MR. McCLUSKEY: That word organic, that word organic may not be able to go on the grade line. It may have to go as a certificate remark because it's not in the regulations at this point that we would put that mark on the grade line itself. So, something to think about. How could we move forward. It might be as a remark on the certificate.

CHAIR MOFFIT-TOBIN: What would have to change to get it on the grade line? I know it can go in the remarks section because it's true and it's valid. But what would it take to be put onto the grade line?

MR. McCLUSKEY: That would take an amendment to some part of the 800 parts of the regulation. I'm not sure which particular, which particular section that, that's in the CFR right now, what, what, how you serve, what a grade looks like. And that's not listed in the, the items that can be a, can be on the grade line. So, it would take a, it would take rule-making.

CHAIR MOFFIT-TOBIN: Thank you, Pat.

MS. RAKOLA: Thank you all for having us
here today. It was a pleasure.

CHAIR MOFFIT-TOBIN: Thank you, too, very much.

MR. NEAL: All right, so we're going to wrap up the FGIS recommendation updates during this section. Dr. Nordlund took, took some of the updates that dealt with a lot of the work that the technology and science division was engaged in. Karen took some of the updates that revolved around the exceptions and the SIMS issues. And I'm going to finish this off by providing some additional updates.

One of the recommendations that came forth from the committee was that the advisory committee appreciates FGIS' recognition of the importance of encouraging competition in the official device system. The committee urges FGIS to develop a comprehensive and pro-active approach to identifying new technology priorities that may bring improved test results, greater efficiency, and lower costs. The committee recognizes that any new devices must add value to the testing system in compliance with the current guidelines.
So, Bruce mentioned this earlier about ways for us to identify opportunities to innovate and introduce new technology. Coming into FGIS, I've learned that we've got a lot of requests from different manufacturers to approve various pieces of equipment for use in the official system. And it requires a lot of work and staff resources to pull that off.

So, we've begun a process to evaluate how do we evaluate these requests for new equipment to be introduced into the official system in a consistent and transparent manner and how do we prioritize those requests? How do we get feedback from the industry as to whether or not these pieces of equipment are needed, and the like?

So, we started that, that process. Staff has drafted up some flow charts and some concepts for us to consider. By the next meeting, what we'd like to do is present to you a way that we want to introduce moving forward on evaluating new equipment in FGIS and the official system. Part of that could involve the committee. Some of it could involve introducing
application processes through the Federal Register.

It's just, it's a heavy demand on resources to accommodate these requests and we need to have a process in place that allows us to manage it in a more efficient and transparent manner. So, we're going to be looking at that and planning on having an update for you, really something to share with you at the next committee meeting.

An additional recommendation was that the advisory committee recommends FGIS to take steps to reconcile and consolidate instructions to insure clear, easy to access guidance. This would help the official system provide more accurate, consistent and timely service. We fully agree. We've initiated a process, I like to call it a strike force attempt to prioritize a number of handbooks and attempt to consolidate the instructions, whether it be program notices, directives, instructions, whatever they may be, consolidate all of that information into single handbooks and also update them at the same time. We've got about 17, I think, handbooks. We're going to try
to go at seven, take on seven of those to have them updated, consolidated by next year.

So, that's a process that we are pursuing right now. As soon as we get it underway, which will be well before the next meeting if all things go well, we'll have more information to share with you before the meeting and during the meeting.

The advisory committee commends the field management division in their efforts to modernize training for new hire graders at the field level. They encourage the continued effort of developing new and innovative techniques for training and continued education in field level raters working directly with end users. Accuracy, efficiency, and consistency is of the utmost importance for end users across all regions. And we appreciate that, that feedback.

The field management division has a similar task force to standardize more training for those that we bring into the system. If I'm not mistaken, real soon we'll be rolling that new training module out and we'll be improving that over time. So, hopefully, as
we're engaging with our end users, there's enhanced or improved service that they're seeing as a result of interacting with the folks we've got at the field level.

So, we also want to thank NGFA and NAEGA for participating in our training of our employees. There's some industry perspective sessions that we've been hosting. I think the FGIS started those in 2017. We had one recently, my first time participating in. Bruce also participated in it down in New Orleans. It really gave us newcomers into FGIS a great opportunity to talk to industry, hear their perspectives. What are they experiencing in terms of customer service with FGIS? How are they doing that? And how can we put our heads together to more quickly address some of the situations on the ground, or just at the table?

Also it allowed our employees to understand the value of their work to this industry, the significance of their work and how important it is to U.S. trade and also to the companies that we service. So, it's been a great opportunity for sharing of information, I think, on both sides because our
customers get a chance to meet our employees and we get a chance to talk more intimately with our customers. So, we're going to continue to improve in that way.

Well, let me, let me go back a little bit here. I had talked to Tony about this. He was, he was out birthing babies. But, you know, Congress had, I didn't talk to Bruce about this, either, but, but Congress had a panel about three weeks ago on virtual reality and using it in training. So, Lee Capper and I, we went up on the hill and we sat on, you know, sat in on the panel just to listen and one of the difficulties that we all wrestled with is training new employees to do this grading and inspection work. Takes a lot of time, lot of effort.

You get these people and they may never have been in an environment such as the lab or on a ship or walking a barge, anything like that. And some people, they want the job, but when they find out what they've got to do, then it's, I don't want the job any more.

And so, what we discovered is that the number of federal agencies that have contracted with these technology
providers to use virtual reality to train employees.

So, the Air Force is one. And what they've done, the Air Force has, I guess it's standard, about a 14 month period to train pilots. With the introduction of virtual technology, virtual reality technology, they've reduced that 14 months to seven months. And so we had one of the providers come to the office and just give us a demonstration because they've also used it with social services to train new social, what do you call them, social workers, where the social worker, you know, put this headset on my head and the Dolby surround sound.

And you're in this home. And there's a lot of noise going on, children crying. And you can just turn your whole body around and you can see the entire house. It lets you sit down and you begin to have a conversation with the parent to ask them what's going on in their home and the person responds based on questions that you've asked them.

So, we began thinking, this may be one way
of us to exploring more technology for our training to prepare new hires for the environments they're going to have work in, whether it's a barge, whether it's a ship, whether it's, you know, walking, using technology now for trains and kind of stowage exams. But different, different reasons and ways that we can look at this virtual reality technology to potentially help us in our training. We've not committed to doing anything, but we are going to explore and we're going to engage the rest of the agency just to see whether or not it can help them, too. So, that's just another idea about new hire training and continuing education.

Cost of ARTI services relative to selling price. The advisory committee appreciates how the merger of FGIS and AMS has brought a renewed focus on customer service for the end user. The committee would like for FGIS to review its procedures and overall costs of the service to the end user in areas where those costs may affect the overall market, competitiveness of the commodity being sold. So, we really don't have a great deal to share here, other than the fact that we're making
revisions to how we review our fees, our service fees are set to recover the cost of program service.

But we're going to be implementing an annual review process for all of our user fee activities to make sure that the fees that we charge are appropriate, we're not charging too much. And we can adjust them accordingly as we're doing now for rice and others to insure that we're not taking more in than what we need to be in operation.

Around fee tables, the advisory committee supports the FGIS proposal to remove the schedule A fee tables from the Code of Federal Regulations. This change will expedite the release of adjusted fee information to interested stakeholders. And we did remove those fee tables from the Code of Federal Regulations.

Another resolution around the budget. The advisory committee recommends that the Office of Management and Budget eliminate the limitation on inspection and weighing service, service expenses. If
this is not possible, the committee recommends that the $55 million limitation only apply to grain export activities under the provision of the United States Grain Standards Act.

We appreciate the recommendation. We are still working internally to address that $55 million cap issue. We've had some conversations with industry.

We've also had some conversations with the Hill. But we think the best method for us to approach this cap issue is to work internally with our budget folks and with our attorneys to see if we can get some things addressed. Hopefully, we'll be able to give you a more in-depth and positive update on this at the next meeting.

We've be meeting with Bruce on this. We'll have to sit down and have some additional conversations.

Regarding FGIS online, the advisory committee commends FGIS for its work and progress on FGIS online and encourages the agency to continue to upgrade and enhance the system to meet the needs of all interested parties. The committee recommends FGIS investigate and report on a back-up system to the FGIS
official service provider licensee.

So, regarding FGIS online, we have just recently launched in a pilot or test mode, an online application process where our clients, our customers will be able to request work orders through an online application. I think DIOO, you all are participating in that? No? Well, I think we've got a couple of field offices participating in that process with Lee. We are going to roll things out slowly. I think one of the things in the past that we've experienced with FGIS online, we may have tried to do too much at the same time.

What we're trying to do now is slow it down, parse it all out phase by phase, so that when we implement, I said, when we implement this online application process, we're going to review that process. Make sure we've got all the kinks worked out of it. If any codes need to be adjusted, if any improvements need to be made, we'll knock that out first before we introduce a new component to FGIS online.

We want to make sure that when we're rolling
things out into the field, that they're done in such a way that they're manageable, that they're feasible, and that they don't disrupt people's business processes to the place where we create more confusion than we do alleviate concerns.

And with respect to the back-up system, there's a lot more investigation we've got to do there to make sure we do, we, we take things into consideration in a very careful and considerate manner and that we've got the resources to actually pursue them without putting additional burden on, on fees. Any questions?

Regarding the systems approach, FGIS execution support to the USDA soybean systems approach should not compel a change in U.S. grading standards, nor require FGIS financial resources. We agree. Just a quick update. AFIS collected 3,874 samples from 14 states during the 2018 Farmgate study. FGIS, we calculated foreign matter on those samples. Samples were sent to AMS C-labs to determine species, count and weight of the weed seeds.

With respect to how we move forward, we
still continue to collect composite samples for YSB ships loaded for China and determining foreign material, and foreign matter, and weed seeds to help track the efforts of the systems approach. And AFIS is planning to continue this systems approach Farmgate study into 2020. We do not use FGIS funding for this project. AFIS provides the funding for us to conduct the work and they do that through a reimbursable agreement.

For international grading report, the advisory committee urges caution in acceptance and execution of new inspection approaches that disadvantage the U.S. grain industry relative to international trade practices. The committee requests USDA to report on international grading practices to entail comparison of result based, of results based on origin and destination sampling and grading protocols.

On this particular recommendation, our international, our international IAD, I'm forgetting the name, they work to compile a list of all of, as many foreign country grading and inspection standards as possible.

And what we're going to be doing is
reviewing what they compile. We'll make it available to you all online through our website, regarding an analysis of each one. That's an extremely burdensome process. So, we'll have to figure out, you know, if we take that on, how do we take that on, but our first mode of action is to make available to you all of the standards that we've compiled, so that they're available to you for review.

For vessel stowage exams, the advisory committee commends FGIS on its efforts to incorporate innovative technology by delivering services to its shareholders, while protecting the safety of personnel.

The committee strongly encourages the approval and implementation of the pilot program for barge stowage examinations via camera system. The committee also recommends FGIS continue studying its technological, innovative programs for cost savings, efficiency and operational safety concerns as it relates to the vessels stowage examinations.

So, what we have going on here, after a lot of work and effort put in by Eastern Iowa in partnership
with our team kind of looking at results, we recently published a program notice that authorizes the examination of river barges using approved video systems and establishes minimum specifications and guidelines for their usage. And so this is available online on our website, as we try to continue to provide service in a more efficient, effective, and safe way for our employees and for our official agencies.

We are continuing to look at this. I know the next one is on deck is for ship holds and I think that one may be a little bit more complex because of different requirements and regulations. But we're still going to explore to see what's possible.

CHAIR MOFFIT-TOBIN: I just want to take a second and thank Tony, FMD and its team, Ron, Charlie, Josh, Pat who did a lot of work, a lot of blood, sweat and tears, maybe not tears, but, I just wanted to say thank you. You guys sped the process along. You guys worked really well with us and no doubt does this program notice -- it's going to save lives. So, I just want everybody to give them a round of applause because this
is fantastic, for not only the industry and operational efficiencies, but the service providers as well and their safety. So, thank you, guys, very much.

MR. NEAL: So, they're not done yet. So, I think this may be the last one. For committee chairperson selection, the advisory committee would like to formalize the Chair selection process. The committee members, in a public forum, could nominate either the committee members or themselves and give the nominated an opportunity to speak for five minutes to present their qualifications in being Chair. The position of Vice Chair should be done in the same process.

One of the reasons why we're here during this meeting is to discuss the Policies and Procedures Manual. We've taken this recommendation seriously, as all others. We've tried to incorporate a nomination and election process in this Policies and Procedures Manual that you all will discuss during your time together.

And that concludes the remaining items from
the committee. I think we've addressed them all. If there are any questions, concerns, the floor is open for those now.

Yes, sir, Matthew?

MR. KERRIGAN: Yeah, just one question on the barge cameras. Is that obviously in Iowa you're working for empty barges that are to be loaded. You talked about vessel holds to be loaded as a potential next. What about unloading? Is that going to be part of the process, such as barges that are unloaded and certifying empty and things of that nature? Are those included in that, that program?

MR. GOODEMAN: We talked about unloaded at ---

MR. NEAL: Come on up.

MR. GOODEMAN: Can you hear me okay? Tony Goodeman with the FGIS. So, the program notes just came out, the policy that, that Eastern Iowa helped develop with the official agencies in GFA is only about empty river barges prior to loading. I think we do use some video technology already to verify empty. That's
basically verifying that the weight that came out of a barge.

We used to send a person out to, to go look at an empty barge to make sure all the grain is out of it. So, it's, it's a little bit kind of a different exam. We want to make sure all the weight is out versus the prior to loading exam is to make sure it's cleaned.

So, I just want to make sure, it's not, it's just a little bit different standard. So, we do use that now, to an extent. It's in more export locations, but the policy that came out was about empty river barges.

MR. NEAL: Thanks, Tony. If there are no other questions, we'll move on to the next agenda item.

Thank you, all.

CHAIR MOFFIT-TOBIN: The next agenda item is a break that we have scheduled. So, if we could come back here in 15 minutes, we'll do that.

(Off the record.)

CHAIR MOFFIT-TOBIN: Introduction of Draft GIAC Policy and Procedures Manual. Yesterday we had time for the committee to discuss the Policies and
Procedures Manual. This is something new that Arthur and his team brought to the committee. And basically, it establishes our rules, our parameters.

It lays the foundation for current and future grain inspection advisory committee's roles, responsibilities, and duties. It explains our purpose, our intent, which is to provide advice to the Secretary with respect to the implementation of the United States Grain Standards Act.

This Policies and Procedures Manual states purpose, goals and intents of the committee. In order to be successful in your role as a member on the committee, you need to know what is expected of you. I said this yesterday, you know, for many of us, when it comes to training, it's like giving your sampler, telling your sampler to go out into the field and you have to go sample that grain but I'm not going to tell you how to do it. I'm not going to give you any resources to do it, but you need to do it right. So, this is the instructions that we need.

We're all policy people, so we always know
what rules do we need to follow where we cross over. So, a lot of us have mindsets like that. So, this is something that was, in my mind, definitely needed and very much appreciated. Some of the other things that is covers is the nomination and appointment process, standards of conduct, collaboration with FGIS and just a mutual respect between each other. It gives a new mindset towards the future of how this body should try to run.

As we stated earlier, we're not always going to agree on everything. That's why the voting process is there. But in general, we try to speak as one voice and that team reflection needs to be there.

I was telling Arthur the other day, I played softball for many years. And when I started at a, when I played for a junior college, we didn't have all the talent in the world. We had decent talent, but we had a great leader. And that mindset was that you guys are a team. You support each other. You support the person next to you. You support the person to the right of you, above you, below you. You're a team. You wanted
them to succeed. And, and we did very well. You took something that was mediocre and we went far beyond what we were intended to do because of that mindset.

And then when I played, I went to a Division I school where it had much more talent, but that leadership and that mindset wasn't there to collaborate and to work as one cohesive unit. It was cut the person next to you, you know, so you get that position, you know, and you had all the talent. Just like we have all the expertise, but if we move together as one, we're much stronger, a much more dominant powerhouse that can get stuff done. We've talked about the purpose in that we want to be an impact. So, that's what this helps us, the Policies and Procedures Manual, accomplish.

We are going to, does anybody want to add anything else about the Policies and Procedures Manual? Good? Okay. So, we are going to go through in wordsmith and add any changes or anything that you feel that you want to talk about, term limits are all put in here. So, if there's stuff that you want to discuss, we're going to discuss it now. But I am going to end
the meeting, so not everybody has to verbally be a part of that. I should have said that out loud.

So, with that in mind, this meeting is adjourned. You're more than welcome to stay, if you want to go through this with us, but you don't have to. So, the meeting is adjourned. Thank you, everybody, for coming today.

(Whereupon, the above-entitled matter went off the record at 3:13 p.m.)