

Docket No. 97 N-0451

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1 MS. NIELLA-BROWN: Good morning, my name is 2 Estela Niella-Brown and I am a public affairs 3 specialist for the U.S. Food and Drug 4 Administration, Miami office. And I would like to welcome you to this public meeting on the microbial 5 6 safety of fresh produce. 7 Each of you should have registered outside. 8 If anybody has not registered yet, please do. And 9 at the registration table you will find an 10 information package such as this, the Fight-Bac, 11 keep food safe from bacteria. And by the way, Bac 12 is the new character for the Food Safety 13 Initiative. I just wanted to introduce him or her 14 to you if you still had not had the pleasure of 15 meeting Bac. 16 In your package you would also have a 17 document, which is guidance for industry. That's 18 the draft guide that we will be covering today, and 19 you also will have an executive summary and a copy 20 of the Federal Register announcement for this 21 meeting. 22 I would like you to keep in mind that the most 23 important aspect of this meeting is the exchange. 24 We would like to keep the meeting as informal as 25 possible, and the most important objective of all

of us being here is to gather input from all segments of the community interested in this topic. So in the Federal Register announcement there is an address to which you could send comments if you think of something that you didn't think of during this meeting. When you get home, if you think about a topic or you have a question or a comment, you could address that particular issue to the Dockets Management address that appears in that Federal Register notice.

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At the registration table you should have picked up an agenda also, and you will see on the agenda that after the introductions we will have some discussion of the draft guide, and throughout the day there will be plenty of opportunity for questions and answers. Toward the end of the afternoon there will be an opportunity also for statements from the public. So there will be plenty of time for exchange of ideas.

Now let me give you a little bit of background on the Food Safety Initiative and about this particular meeting that we are conducting here today. On October 2, 1997 President Clinton announced the initiative to ensure the safety of imported and domestic fruits and vegetables. As

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part of this initiative the President directed the Secretary of Health and Human Services in partnership with the Secretary of Agriculture and in close cooperation with the agricultural community to issue guidance on good agricultural practices or what we have come to call G-A-Ps or GAPs and on good manufacturing practices, traditionally called GMPs, but this time for fruits and vegetables.

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The Food and Drug Administration and the U.S. Department of Agriculture have developed a proposed guide that addresses microbial food safety hazards and good management practices associated with several things such as water quality, sanitation, hygiene, transportation, manure, and municipal biosolids common to the growing and harvesting of most fruits and vegetables that are sold to consumers in unprocessed and minimally processed forms.

The draft guidance is intended to assist growers and handlers in examining their operation for potential microbial hazards, and it will also assist in identifying management practice options that may be adopted to minimize the risk of microbial contamination from fresh produce. Last December we sponsored a series of grassroot meetings around the country to introduce a working draft of the guide. In fact, one of these meetings was held here in Florida in Palm Beach County. We will review today, later on in the program, comments received from at these meetings. And the intention or the purpose of today's meeting is to continue that process of actively seeking input on the draft guide.

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Saying that I would like to also explain that three meetings such as this one are being conducted, one of them already was held the day before yesterday in Washington D.C. This one here in Homestead, Florida is the second meeting, and next week on May 27th there will be a third meeting to be conducted in San Diego, California.

The draft guide, if you look on the registration table, you will see that it has been translated into Spanish, so it is available in Spanish and English at this time and we expect to have a French version available by the end of May. Both translations as well as the English version will be posted on the FDA web site in the internet. For those of you who still are not very familiar with the FDA home page, the address is

WWW.FDA.GOV. For this meeting here we have also prepared slides for some part of the presentation in Spanish, so there will be a part of the agenda in which you will see simultaneous slides in English and Spanish.

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Today's meeting has been structured to maximize your participation. There will be, as I said before, plenty of opportunity to give your comments and ask questions after each presentation. We are most interested in your comments and reactions to the draft guide. And like I said before, if you get home and think of something in addition to what you said here, you can submit your written comment to the FDA following the information on the Federal Register announcement, just make sure that you include the docket number on your comment.

If you look to this side of the room you will see that the meeting is being transcribed so that our development team can review all your comments and make revisions to the draft guide as appropriate. Also for the benefit of the person transcribing I'm going to ask that when you have a question or comment, and I would like to point out that there is a floor microphone in the center aisle, please come to the center to the floor microphone and identify yourself and, if possible, our transcriber would appreciate it if spell your name.

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For question and answer purposes we also have some forms that Frank, one of your FDA public affairs specialist, who is standing in back of the room, Frank has some forms for questions. If you think of a question while a presentation is going on, please obtain a form from Frank so you can write your question so you don't forget it and that will be addressed in the question and answer period.

Let's see. That's about all I have to say in this brief introduction, which is not that brief anymore. Again, the atmosphere, we want it to be informal. Feel at home, feel free to make any comments during the comment period. And now I'm going to introduce the speakers at the table currently.

The first person on my left is Dr. Lou Carson
from the Food and Drug Administration. He's a
Deputy Director of the Food Safety Initiative.
Next to Lou Carson is my "Jefe", Doug Tolen.
He's the District Director for the Florida District

1 of the Food and Drug Administration. His office is 2 in Orlando. Next we have Dr. Martha Roberts. Dr. Roberts 3 is the Florida State Department of Agriculture and 4 Consumer Services, Deputy Commissioner for Food 5 Safety. And I think she does not really need an 6 7 introduction because I saw everybody greeting her when she came in. 8 9 And next to Dr. Roberts we have Donald Pybas. 10 Don is the Director of the Miami-Dade County 11 Cooperative Extension Service, and he's been 12 working with us for several years now. And we'd 13 really like to appreciate at this time the 14 Extension hosting the meeting here at the 15 Agriculture Service. So now I would ask Lou to 16 please come to the podium. 17 MR. CARSON: Thank you very much, Estela. 18 Good morning. My name is Lou Carson. I'm Deputy 19 Director of the Food and Drug Administration, Food 20 Safety Initiative Staff, and I want to thank 21 Estela, State of Florida and Mr. Pybas for holding 22 this meeting here. 23 As Estela mentioned, the Food Safety

Initiative announced by the President last year is a inner agency and State and local food safety

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system program. We in the Food and Drug Administration, our colleagues at USDA, both the Extension Service, foreign ag service, food safety and inspection service and the State and local levels, are working together to achieve the goal that the President set forth, and that goal was to reduce to the greatest extent possible microbial contamination of foods. And in particular today we are talking about fresh and fresh cut produce that may cause foodborne illness.

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There have been a number of reported and an increasing number of reports of foodborne illnesses associated with fresh produce, and so over and above the Food Safety Initiative the President announced last year, in October he announced a directive to the Food and Drug Administration and the Department of Agriculture to work together in promoting and developing good agricultural practices.

The meeting today is another of a series of meetings that we've held around the country where we want to get grower, producer, consumer input into how best to develop and how best to deliver these good agricultural practices, so that we can make an improvement in the food safety network and

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consumers can feel assured that the food that they receive is both nutritious, healthy and safe.

We at the Food and Drug Administration have developed, again with our colleagues at the State and local level, at the other Federal levels, the document that we have before us today to discuss. I think as Estela mentioned, we want to make this as informal and as interactive a process as possible. This meeting is important to us, to add to the record, to understand from the grower and consumer perspective how these agricultural practices may be applied, what they should say and to give us as good a feel for agricultural practices that are currently being used today.

In association with these meetings we and our colleagues are also going on a number of site visits to farms around the country, and we are pleased to be doing that tomorrow. Again, that will help us better understand the agricultural practice and better translate that into words within the document.

I want to encourage you to speak today, because as Estela mentioned, this session is being transcribed. We need your input so that this document can be as good as possible. Our process

is that we are seeking comments through June 29th, both in these public meetings and as comments to the dockets as Estela mentioned. Following that we will be working with our development team to come up with the final guide, which we hope to publish in October.

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That final guide is simply a guide -- these are voluntary guidelines, and that final guide is a starting point. It is not the last guide you will see. As a voluntary guidance it must updated as we learn more about the science, both from the risk assessment and from the science based information on the microorganisms that may or may not be on that fresh produce. So we fully expect that this guide will be a living document that will have many iterations and updates as we learn more about the microecology of these microorganisms and that fresh produce.

We also want to learn from industry as these practices were applied and where things work and where thing did not work, and we need to get that input so that we can make this document as good as it can be. So again, I encourage you to be forthcoming today, to provide your comments, questions. To the extent we can answer those

1 questions, we will. And we really do want to hear 2 all that you have to say and that's why we are here 3 today, so I encourage you to do that. Thank you. 4 MR. TOLEN: Good morning and welcome. We have 5 done a number of these programs in South Florida over a number of years, and this is one of many 6 7 that we've done here since I came down as Florida's director in 1986. Some of you have probably 8 9 participated in a variety of programs we've done in 10 the past, and I welcome you. We'll make this as 11 informal as we can. I've taken my coat off, I'm 12 not wearing short sleeves. I invite you to do the 13 same, including our speakers. 14 We have a relatively smaller audience than we 15 anticipated, although we may have some folks 16 arriving late, so I invite you to move forward if 17 you'd like and make this as intimate a workshop 18 process as we possibly can. So if you are having 19 trouble hearing and would like to be -- come get 20 closer to hear the answers to questions that would 21 be asked and answered, feel free to do so. 2.2 I'd like to mention just a minute or two 23 telling you about FDA and FDA Florida. I'm not 24 sure all of you know of the role of our agency as a 25 We were created in 1906. We regulate the whole.

U.S. food supply, both domestic, and I'm not going to emphasize import because that's a big part of what we do in the produce industry. Also all prescription and nonprescription drugs, medical devices and radiation emitting devices such as X-ray ovens and X-ray equipment, so we have a wide range of responsibilities.

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The value of the goods that FDA regulates is some 570 billion dollars every year. Now, I just read an article the other day that said we import in the United States 30 billion tons of food per That's a lot of watermelons, a lot grapes, vear. if you will, and a lot of that comes through our ports here in Florida. And we have import staff both here in Miami, in Tampa and in Jacksonville who are looking at this merchandize, as well as domestic investigational staff who inspects some 6,000 domestic processors, manufacturers and warehouses here in this state, and that's in addition to what the State and local health components do as well.

And how do we do that? On the domestic side of the house my investigators, some 90 of them here in Florida, go out and actually do physical inspections at these manufacturing sites. On the

import side of the house we physically collect samples as this merchandize comes in and it's sent to a laboratory in Atlanta where they run that for pesticides, multibiologic analyses, heavy metals, labelling, what have you. So we are an important process, important presence in the lives of American consumers through the volume and value of the products that we regulate.

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Part of this process is getting involved in the development of new guidance and regulations, and as you've already heard, that's why you are here today. We have a new guidance coming out, and I want to emphasize as Lou already stated, because this was a big concern in the past, this guidance is not required, it's not compulsory, it is voluntary on the part of both domestic and foreign producers. So this guidance requires your input and we value that.

This is one of three opportunities between now and June 29th to have public comment, public input to this document before it is finalized. So if there's some part of these new guidelines that bother you, as either a domestic farm or as a foreign processor, industry association, here's the opportunity to have your comments heard in a public

forum, an opportunity for our regulation writers to look at those comments as they come in from these various sites and make a determination as to whether or not these guidelines should be modified so that they are doable and usable by the industry to which they are intended.

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None of us are farmers, none of us are growers, none of us are importers, we like you are consumers of goods. We want to make sure they are as safe as possible. My children eat produce just like you and your children do, so we have equal concerns. But here's an opportunity to come up with some guidelines we can all live with, so again, let me emphasize we solicit your input, we invite your input and we appreciate your input. Thank you.

MS. ROBERTS: Good morning. I'm Martha Roberts. I'm one of the Deputy Commissioners of the Florida Department of Agriculture and Consumer Services and I'm very pleased to be here to welcome you today, because safety of our food supply should be the utmost concern to us, not only as individuals, but to us as a nation.

We live with a global trading world today. We have a global food supply. We must be concerned

about every source of food that we are consuming, and again try to apply consistency in the way that we deal with that. But we vary, definitely, and we are proud here in the State of Florida of our strong proactive food safety program and we are proud of the multi billion dollar agriculture as of what they produce of the food supply of this country.

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It's of critical importance, as we go through the review of this document and as we consider this subject, that we apply realistic common sense guidance, not only to our domestic industry but to those foods that we are importing from abroad. But it is also critical that we have appropriate, not only guidance to the producer, but that we have appropriate guidance and education, not only to the producing industry but to the general public. And it's critical that we also require adherence of all to the practices that we are outlining.

So this is the second of the three public meetings, as you have had described to you, and it's indeed an opportunity for you to raise your voice and support the document, as a voice of concern about some specific aspect of the document. I know a good many of you in the room. I know that many of you are not shy. This is your chance to have a public statement, either in support or of your concerns and it's a rare opportunity.

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And I do commend the Food and Drug Administration for having this public meeting here in Homestead, because it is most appropriate that this public meeting be held here, in a community where the very basis and the life blood of this community is agriculture. It is very appropriate that one of these public meeting be held here because this is an area of the United States in the winter months that produces 95 to 98 percent of some of the specific fruit and vegetable commodities that we are talking about that are grown domestically. This rest of that supply of those fruits and vegetables come from other countries during the winter months.

My father was a local newspaper editor back here in Homestead in 1939, 1940. He wrote a small town article about the comings and goings in the community. It was an ag community then. The life blood of this community is still agriculture, still the very fruits and vegetables that this document speaks about. So it's the very area where the farmers are producing the health giving, the cancer and disease fighting fruits and vegetables that we need to consume more of, but yet that we must produce in a safe manner.

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So again, we are delighted that it's here in Homestead, but I want to commend FDA also for not only the willingness to have it here in Homestead, but for the willingness to involve others. This is a Federal document. The Food and Drug Administration did not have to involve us in State government, they did not have to involve us, some of you out there in Florida industry, but they did.

They came to us and asked us for input early on with some early drafts, and we were able to provide some input and some comments and to maybe have a little redirection and thought or often-times mention things that maybe were not common sense if you are actually out in a farming situation and they very willingly took some of that input, and I want to publicly tell them that we appreciate that. And we also appreciate their willingness to go out in a real life farming situation with some of the scientists and some of the committees dealing with this, to see what is required in producing and harvesting and packing a product on a real farm.

2	So we are delighted that they've allowed the
3	participation not only of our State of Florida, but
4	of California. And we ask them, as has been
5	permitted to you, for their continued willingness
6	to listen to those involved in food safety as it is
7	implemented in the marketplace and in State
8	government and food safety practices as they are
9	implemented on the farm.
10	And I'd be real negligent if I didn't commend
11	the farming industry, certainly from personal
12	experience in the State of Florida, because I know
13	that there have been a tremendous number of
14	practices that are in this document that have
15	already been common sense practices, industry has
16	done this for years. There are other new
17	suggestions that the industry has on the initiative
18	implemented, and I know of these growers right now
19	that can even trace back their product to the
20	individual picker on a farm. And so I commend the
21	industry for their willingness to work in
22	partnership with State and Federal regulatory
23	agencies to achieve the safety of the foods we eat.
24	So on behalf of Commissioner Bob Crawford,
25	Commissioner of Agriculture of the State of

Florida, on behalf of the six billion dollar
agricultural industry, to the 54 billion dollar
economic impact of this state and on behalf of the
very proactive and excellent food safety
professionals we have at the Department of
Agriculture and Consumer Services and Inspection
and Testing Program, I welcome you to the State of
Florida and to the second of three public meetings
and I urge you to not be reticent in your comments
either verbally today or in writing to the Food and
Drug Administration and what you feel needs to be a
part of this document, thank you.

MR. PYBAS: My name is Don Pybas, I'm the County Extension Director. I direct this facility that we are meeting in today. We are very privileged to have the opportunity to host this meeting. As Dr. Roberts indicated it's very significant that we are having this meeting here in Homestead, center of a very large agricultural industry down here.

We in 1995, 1996, Dade County, Miami-Dade County as it's now called, had about an 860 million dollar economic impact from agriculture. This was a very significant sector of the economy and in particular in the south end of the county, a very big employer, so we are very fortunate to have this meeting here. I think it's very apropos for this industry.

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As far as the Extension Service, we enrolled in this program today and also any subsequent activity of -- the Extension Service has been around a long time and it's very appropriate to say that, you know, we were first created by Congress and USDA in 1914, by an act of Congress, and the first extension agent down here was a home canning agent, it was not an agricultural agent. And food preservation was a key thing in the prerefrigeration days, the early teens or early part of the century, so it's kind of interesting to see that we had people here as educators helping people preserve the foods as they grew it on farms here in South Florida as well as small types of commodities.

So today the Extension in this county has 16 professional agents, several of which are in the audience today. We have a couple of our Food Science and Human Nutrition Agents, if you can stand. It's Jan Gibson and Monica Dawkins, they both work in the area of food and nutrition and also food handler and food safety training.

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In another part of the room are a couple of my ag agents here. Dr. Carlos Balerdi is a Tropical foods agent, and Teresa Olczyk is one of our vegetable agents that works with a lot of post production as well as trials on varieties and other types of programs. We have other commercial commodity agents here in this office as well as the other offices we have here in Dade County. We have four offices here. We are one of the largest staffs in the Extension.

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Our role, as I indicated a little bit earlier is a little different than the rest of the agencies, FDA, USDA and the State Department of the Agriculture and Consumer Services. We are one that-- we are education and information dissemination, that's our job. We are affiliated with the University of Florida in part of the land-grant system, and we do an extensive amount of training and education opportunities through this facility right here, as well as on field, out in the field demonstrations, those kinds of things.

We are not a regulatory type of an agency. We do not enforce or regulate growers or any of our clientele. We are here to assist them in disseminating information such as the draft guidance documents and other types of training programs. We do the pesticide training program for the State of Florida here in this county, in this facility for all of the pesticide users that are used in the district of pesticide.

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So we feel like we have a role here to educate and disseminate information and we will continue to work with the agency to do that. There's a little bit -- it's going back to the agricultural aspect of this community. We do have a centennial of agriculture that's going on here in the Red Lands, which is this general area that we are in, South Dade. We do have information on a lot of the activities here out at the counter, in the registration counter out there. We hand out material on that. We are very proud of this industry and participating in the centennial activities as a board member of that group.

Also for your information, if you are not familiar with the Extension Service there is a brochure on what we do and how we are affiliated with the University of Florida as well as Dade County or Miami-Dade County and USDA. So if you'd like either of these, they are out on the counter there, thank you. And if you there's anything else that we can do as far as providing some accommodations or whatever, we do have information on the restaurants. If you are interested and you are not familiar with the area, there is a map with a list of restaurants in back of the rooms. Also, the restrooms are in the lobby area. If those become too busy, we do have additional restrooms in back of the facility. If you go down the hallway through the lobby they are all the way in the back. The pay phone is out in the lobby by the soda machines. Anything we can do to assist you, please feel free to ask, thank you.

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MS. NIELLA-BROWN: After the introductions now on the agenda we have an update on the development of the draft guide, and Lou Carson from FDA will be covering that topic.

MR. CARSON: Thank you again, Estela. Much has already been said about how we got here today, but let me review the process. We started back in November, November 17th, and had a public meeting in Virginia to talk to the committee about the overall concepts of the good agricultural practice document that we have here today.

Following that meeting and getting the input from industry consumer groups, we also met with the National Advisory Committee for Microcryterion Foods, which is an inner agency, Federal scientific body, that advises different agencies on scientific issues, so we wanted to also apprise them of what we were doing and to get some input into our draft guide. On November 25th we published that working draft guide for comment and we received approximately 55 written comments to the docket.

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In the six or seven public meetings that we held over 400 individuals attended those meetings and those transcripts were also gotten, so that we can review the comments that were made at that time. We convened a Federal and State development work group. We had individuals from Departments of Agriculture and Health, from the states of California, Michigan and Florida, along with OSHA, Department of Agriculture, EPA and the Food and Drug Administration to review all of those comments and to assess what it is we had in the guide and how we can best refine it to more appropriately describe what we were trying to get across.

That input from our colleagues was invaluable, and later on I believe Dr. Smith will also talk about how we were able to, I think, refine this document appropriately, based on that substantive input. We then tried to put together the guide based on all of that input, and then there were several affidavits that were circulated into that development team and a broader array of Federal and State scientists so we could have good input into the document. April 13th we published the draft guide that you have in your package today.

I think the panel that's here at the table truly represents a broad array of people that we are trying to reach and tried to work with. During this period of time we've also worked with trade associations, Western Growers, United Fresh Fruits and Vegetables and the Foreign Trade Fresh Fruit and Vegetables of America, in trying to best understand from their perspective how best this guide can be applied. So we have strived to do a number of outreach activities so that we would engage industry and make sure that the industry understood that we really did want them to work with us as partners on this guide.

This meeting today, again, is an effort to engage industry and consumers in being a partner on this guide. We recognize the guide must be as practicable and common sense as Marty Roberts said, so that it will be utilized. If it is impractical,

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we recognize that it will never be adopted or applied. So our purpose here is to get the most practical and have a guide possible and have an output that really does improve the overall safety of fresh fruits and vegetables.

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6 As we are developing this guide we need to 7 come up with a mechanism so that we could determine what is -- what are the agricultural practices, not 8 9 only in this country but around the world, and to see what impact the quide will have. We are 10 currently working with the National Agricultural 11 Statistic Services and the Department of 12 Agriculture to put together a survey, and this 13 survey is like the ones they do currently for 14 pesticides and other commodity issues to get a 15 sense of what the agricultural practices are, so 16 that we can better understand those practices. 17

We are pursuing this effort in the next fiscal 18 year with the National Agriculture Statistic 19 Service, and again, it will be a survey through 20 NASDA, National Association of State Department of 21 Agriculture, as they do other surveys, and it will 2.2 simply be to get a catalog of the agricultural 23 practices and then in several years later to see if 24 the guide, in whatever form it is then, has had a 25

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material impact.

We are not here to assess what a good practice is and what a bad practice is, we are here to assess whether the guide has made a material difference, whether the guide, which we are putting forward today, first sets awareness. If producers become better aware that the commodities, the food that they produce must be produced in a certain manner so that they are as safe, nutritious and healthy as possible.

So the survey that we are trying to put forward with the Department of Agriculture's assistance is simply to give us a measurement on these voluntary guides. We recognize they are voluntary, not everyone will apply them, but we want to see if there is some measurable impact.

We are also working with our colleagues in the foreign ag service, State Department and elsewhere to see how best we can approach the foreign producers with the same survey instrument and to, again, get a sense of the foreign agricultural practices. This is somewhat of a daunting task. It's a big world out there, but we do need to get some sense of what the ag practices are so that we can see that this document does have validity. We need to make sure that the document is making a difference. And if it's not, then we need to be able to change it so it will make a difference.

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So our whole purpose in using the guide and in doing the survey is to try and make all producers and consumers aware that there are some possibilities, some potentials with fresh produce to cause foodborne illness, but by and large food is produced in a safe and healthy manner, and especially if these particular steps are taken, we can ensure that to a greater extent.

The program that we have set up for you today has this first panel and then our next panel will be our different colleagues talking about the means and mechanisms that we are looking at to further promote and distribute good agricultural practices. And then this afternoon we will be going over the guide in section by section detail, and we really encourage you to stay this afternoon to discuss the guide in detail so that we can get that valuable input there. Thank you.

MS. NIELLA-BROWN: At this time we have an opportunity for questions and answers on the development update. Is there any question at this point?

MS. GILLEN: Hi, there. My name is Michelle Gillen and I represent WFOR, the CBS station here the Miami, I have a few specifics about the program. I know we'll be going through it, but let me just for starters begin, Mr. Carson, I know you just mentioned that by and large most produce is produced in a safe manner. I'd like get vour reaction to the results of the recent GAO report that spoke to the fact that at least in the report's opinions that foreign produce, the Federal government cannot guarantee the safety of foreign produce today, and vis-a-vis the point that only two percent of it is being inspected by authorities here in the United States. I'd like to know your reaction to that, if there's any concern regarding that by panel members.

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MR. CARSON: I believe the Food and Drug Administration made a formal statement and public statement concerning the GAO report. By and large what we have said is much of what the GAO report has recognized within the food safety system is that the level of resources, which the Food and Drug Administration and other Federal and State agencies have to devote to imports, is diminishing. And that because we have such small

resources, the level of affirmative steps to ensure 1 2 that the produce is safe is lacking. 3 But let me take a further step and say that by 4 and large the Food and Drug Administration 5 recognizes that the industry has the major 6 responsibility in producing safe, wholesome and 7 nutritious food. We as a government agency are 8 here to ensure that those practices are being 9 upheld. With foreign firms, obviously, we do not 10 have inspectors abroad, but all we are trying to 11 say is, what the GAO is trying to say is, we need 12 to have more information as to how produce is being 13 produced, but we do not have any information that 14 foreign produce is produced in any less quality 15 manner than it is here in the United States. 16 MS. GILLEN: But the result of the report 17 though contradicts that, sir, and says that under 18 the current system the Federal government cannot 19 quarantee the safety of them and I quote directly

21 MR. CARSON: I don't know that we can 22 guarantee the safety, we only analyze a very small 23 portion of any food product. And again, as I said, 24 I believe that it is industry's responsibility to guarantee its product.

from the report, so I least --

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MS. GILLEN: My questions, again, is just is it acceptable to you that our government, at this time inspects only two percent of foreign produce? Is that acceptable? Should it be acceptable?

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MR. CARSON: We believe we can do better. We believe we should do more. We are doing as good a job as we can with the resources we have available. If we are looking at the issues today we are here to discuss, the only way we can make an impact on improving food safety is not by testing end product, but through prevention. We believe our approach is through preventive systems, such as good agricultural practices. We have come out with a number of regulations on juice and eggs so that food can be produced and through that production we can assure that food is safe.

There is no amount of resources that would allow the Food and Drug Administration or any government agency to test each and every food product. If you are asking --

MS. GILLEN: It's just I think the American public is expecting more than two percent. I know you want to deal with specific comments, so let me-- as you were saying deals with of course we can't have inspectors in every country, I just want

to follow up and then I certainly would relinquish the microphone.

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A good portion of the quideline that deals with the importance of sanitation, and what I got from it through reading was a lot of emphasis seems to be on workers, the emphasis on the report, the guidelines, seems to be on workers washing their hands after using the bathroom, and I just wonder if that side step is a reality issue in some country such as Mexico, where we spent a good deal of time, where there are no handwashing facilities or often there are no toilets. So if their recommendation is just for workers having to wash their hands, the workers in the field will tell you very freely, there's nowhere to wash their hands, there's often nowhere to go to the bathroom other than the field. Why does this guideline not address that and should it?

MR. CARSON: Well, I beg to differ, because I believe the guideline specifically does have worker health and hygiene, and we do talk about toilet facilities.

MS. GILLEN: But it only makes reference to U.S. law and countries like Mexico are not regulated by U.S. law.

MR. CARSON: As we are doing in this guide, we are recommending good agricultural practice, not only for the domestic industry but for the foreign These good agricultural practice industry. guidelines, which are voluntary, will apply domestically and internationally. And as I said, our next panel will discuss mean and mechanisms that we are trying to use to promote these internationally. I would not agree with your summary of the facilities abroad as you have described them, because we do receive quite a large amount of foreign produce during the winter months, which Southern Florida here also contributes to. And if you look at the data, the amount of foodborne illness is not as high as you would expect, if the conditions are as you've described them.

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We do recognize that food handling is a significant contributor to foodborne illness, and we are addressing that within this guide. It is well known, whether it's in a hospital setting or in a field setting, if people do not wash their hands infections increase.

MS. GILLEN: Are you aware of the fact that FDA inspectors have gone to Mexico and confirmed

1 that in some fields are no handwashing facilities? 2 Are you aware there have been inspectors in the 3 past year and-a-half that went there and formally voiced concerns over that? 4 5 MR. CARSON: I'm not sure exactly which 6 incident. We have visited abroad, but our only 7 purpose when visiting abroad is tracing back if 8 there is a problem with a particular food product. 9 We by and large do not inspect foreign farms unless 10 they are specifically under --11 MS. GILLEN: I'm not saying you do, I'm just 12 saying that --13 MR. CARSON: I'm not an FDA inspector, I'm not 14 aware of FDA inspectors, per se, going to foreign 15 farms and looking at that. I do know the State of 16 California and others based on the strawberry 17 incident, have gone to Mexican farms and 18 investigated certain Mexican farms, based on the 19 incident with Hepatitis A and frozen strawberries. MS. GILLEN: Are you aware of any reports that 20 21 came back over regarding the concern over the lack 22 of handwashing facilities and sanitation 23 conditions? 24 MR. CARSON: I am certainly aware of all of 25 the reports. I am certainly aware of what

California is doing in that industry. I'm certainly aware of what we are doing with the Mexican officials to ensure that their practices and what they are doing through their government and through their trade associations are consistent with what we expect for good, safe food to come into this country, but I'm not sure if you have a specific instance in mind.

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MS. GILLEN: Yeah. Actually I've been trying to get some of that information back for six months. In the congressional hearing after the strawberry incident, it was Doctor -- I think it was Frank Shantz (phonetic) from the FDA or you are familiar with his name, I'm sure. Dr. Roberts, she must know who I'm talking about.

MS. ROBERTS: Dr. Fred Shantz?

MS. GILLEN: Dr. Fred Shantz, yes. He was before the congressional hearing and answered the question and specifically spoke of the fact that some of his investigators had gone to Mexico and indeed expressed concerns over the lack of sanitation and handwashing conditions. I've been trying to follow up on that investigation all these months and have been told they have free inspections, and I just wondered, given your

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1	prestigious position on this panel, given the part
2	of the FDA, if anyone has ever filled you in on
3	those findings he spoke of?
4	MR. CARSON: Dr. Shantz was responding to a
5	specific instance where we followed up on foodborne
6	illness and which we did investigate in a
7	particular farm and those findings were based on
8	that investigation.
9	MS. GILLEN: And those findings are, sir?
10	MR. CARSON: I don't have them in front of me.
11	I can't quote for them.
12	MS. GILLEN: In general is it what I've been
13	saying, that they did in those cases find concern
14	over the lack of handwashing?
15	MR. CARSON: I can't without the record in
16	front of me. What I wanted to say is, to this date
17	with the Hepatitis A and strawberries neither the
18	Food and Drug Administration nor the Center for
19	Disease Control nor anyone has pinpointed the
20	source of that contamination. We still do not know
21	if that source was in Mexico or in California or
22	elsewhere.
23	MS. GILLEN: But it's still
24	MR. CARSON: That source has never been
25	determined, that's my point. I do not have the

specifics in front of me as to know if he cited handwashing facilities or whatever. Certainly Hepatitis A can be conveyed through poor worker hygiene and practices. There have been other Hepatitis A outbreaks that are associated with U.S. produce.

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MS. GILLEN: I'm in no way saying that U.S. produce because it's domestic is safe, and I'll sit down, but my point is just on the various specific incidents, should part of the guidelines deal with sanitation. Those words that were set before the congressional panel I thought were rather important and I just was curious --

MR. CARSON: Well, we certainly think they are important and that's why we have the Food Safety Initiative and that's why we have the produce initiative. We believe that particular steps must be taken, both domestically and internationally, to ensure that that does not occur. But I do not have the specifics in front of me to respond to that specific instance that you are talking about.

MS. PEAL: Good morning, everybody. I'm Vicky Peal. I paid my admission dearly to be here today, I took my Dad out for dinner and killed him and I just don't want it to happen to any other members of my family. I usually speak in Washington and it's the greatest honor to be here in the State of Florida, the state of conscience and culpability for so many wonderful practices we put ahead and I am proud to be a member of this state. I just wish the other 49 states would follow through in many instances.

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There are a couple of things that have already been stated that have alarmed me this morning, one of those statements were that industry is charged to help make sure we have safe food, and the other one that FDA didn't have to invite us here today. You're paid by the people in this country to keep us safe, not industry, and to do anything but that, to let any other agenda get in your way implies that your priorities lie elsewhere. We have over 9,000 deaths annually, and those are the ones that are reported and we know we are under reporting. They shouldn't be happening and until you demonstrate that you have a clear focus to all the dangerous situations at hand, we are going to be very, very concerned.

The only other thing I want to say, and I hope to be speaking later and I want us to focus upon this, is that your main goal is to have this guide produce measures that will have an impact on my safety, my family's safety and the safety of everyone in this room. You are going to study and study and study, what are you going to do until a guide comes out with definitive statements? Are you just going to take a body count? We need to have measures happening right now, today. Please, as we go toward today we need answers, not more studying. Thank you.

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MS. NIELLA-BROWN: While the next person comes in, I just want to say, at this point let's try to keep the questions limited to whatever has been discussed now and later on during the afternoon there will be an opportunity for other statements, but at this point let's try to keep the questions limited to the draft guide and comments from the draft guide.

Also, again, let me mention that there are forms to write the questions, Camille has them now and I believe Frank has them also. If you would please write the question, that will make it easier. We are going to have one more question right now and then we are going to have to move on in order to keep the agenda moving. Go ahead. MR. VUCETICH: My name is Ian Vucetich, I-a-n

1 V-u-c-e-t-i-c-h, from SGS Control Services 2 worldwide inspection and standard company. We've 3 been following the Food Safety Initiative from the 4 start very closely and we have basically a foreign 5 produce concern and is basically three concerns 6 which is voluntary compliance, voluntary compliance 7 and voluntary compliance. And my questions are 8 basically -- my suggestion would be, what if the Food Safety Initiative if more collaboration with 9 10 private enterprises for more controlled inspections 11 of foreign countries could be done? I know 12 resources of FDA are limited in this regard. 13 MS. NIELLA-BROWN: You had a question, right? 14 MR. CARSON: Is there a question? 15 MR. VUCETICH: It's a comment on whether the 16 FDA should collaborate more closely with 17 independent companies and help on inspections and 18 control, because, for example, the Food Safety 19 Initiative fell short of recommending Haccep for 20 foods and vegetables, I know it's recommended for 21 meat and poultry, and the question is why didn't 22 they go that extent to recommend it for foreign 23 produce? 24 MR. CARSON: Okay. Thank you for you 25 Again, the Food and Drug Administration comments.

applies standards to the best of its ability based on the best science available. We have, through the Food Safety Initiative, initiated seafood Haccep this last December. We recently came out with a proposed guide on juice Haccep and juice labelling, and we have also recently come out with eggs labelling and eventually will be an eggs Haccep along with our colleagues at USDA.

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In the arena of fresh fruits and vegetables the research science makes for our understanding of how microorganisms become pathogenic, when they become pathogenic, is still very much unknown. We have really a deficit of science to base definitive steps which Haccep requires. Haccep is a preventive system. We cannot just say don't do this, Haccep has to require a statement of what should the producer do. What are the vectors? What are the microorganisms that they need to be aware of and how should they treat their water, manure or whatever in order that they minimize that possibility?

We are undertaking a large inner agency research program to try and answer those questions as soon as possible. We recognize that we need to deliver positive techniques, technologies to the 1

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industry so that they can employ them.

We are, I think, working through the industry in many ways. We convened an industry research meeting last October. We asked industry what research they are conducting, we asked them what they felt the priorities were in resolving some of the very difficult scientific issues confronting us. We based our research program on priorities that they identified, which they were not meeting, they were not able to follow through on, as well as the ones that the Federal government also feels is very important, and we will be coming out with a research program to show what it is we need to follow through on.

The guide represents the best science we have today through those vectors that we know from past practices and science that may contribute microorganisms to fresh produce, and the fact that fresh produce is not further treated so that it would reduce those microorganism. We need to make people aware of those particular vectors; water, worker sanitation, facilities sanitation, transportation, manure and likewise. And that's what the guide comprises. So I believe we are trying to make those connections with public and

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1	private industry and are working academia.
2	It's true, we at FDA do not have all the
3	answers. We are trying to have a collaborative
4	research effort with all the best scientists in the
5	world to come to grips with those products and to
6	resolve them.
7	MS. NIELLA-BROWN: At this time the agenda
8	calls for a break. We are running a little bit
9	late so instead of a 15 minute break let's just
10	take a ten minute break and be back here by 11:30.
11	(Thereupon a recess was taken in the
12	proceedings, after which the deposition
13	continued as follows:)
14	MR. TOLEN: We lost some time here so we want
15	to move forward as quickly as possible so we can
16	meet our time frame and complete our program and
17	provide you with the opportunity to have your input
18	as well.
19	The next set on the agenda is a panel
20	discussion about the public health significance of
21	good agricultural practice. We want to cover a
22	couple of things here. There are four areas we'd
23	like to concentrate on, and if we tend to run a
24	little long, what I'm going to suggest we do is
25	maybe take a lunch break before we complete this

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activity and perhaps pick up the last speaker or two after lunch. So Estela, kind of watch the time and give me a signal when we get about when it's time to break for lunch. The reason we'll do that is we want to get you to lunch fairly quickly before the crowds hit, so we get back in time to complete the afternoon program and spend as much time as possible for Q and A. So we may take a lunch break at some midpoint in this next set of presentations.

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What we intend to cover on our next part of the program is to examine the importance of good agricultural practices, in meeting them, that the broad public health goal of improving food safety and reducing foodborne illnesses. We want to explore some examples of how we might cooperate internationally to make that happen, and we also want to talk about some model which we might use to disseminate information both from the domestic front and on the international front to make sure that the folks who need to have the information, who need to have that technical assistance, wherever they may be in the food chain and finally the last item we are going to chat about a little bit is not on the agenda, is traceback mechanics,

1 which is part of any investigation on foodborne 2 illness, and I'll speak to that lastly. 3 Our panel to do that, again, on the panel here from my left Lou Carson will be with us again, and 4 5 you all know Lou well by now, but next to him is Ricardo Gomez from the United State Department of 6 7 Agriculture. He's the Chief Holticulturalist with 8 the Cooperative State Research Education and 9 Extension Service. 10 To his left is Dr. Wayne Derstine. Dr. Derstine is with the Florida State Department of 11 12 Agriculture and Consumer Services, and he's the Environmental Administrator for the Food Inspection 13 14 Unit there. 15 And to his left is Lloyd Harbert, also from 16 the United States Department of Agriculture, and 17 Lloyd is the director of the Food Safety and 18 Technical Division, Foreign Agriculture Service. 19 He's one of those folks who represent us in foreign 20 lands, just happened to come back from a tour in 21 And then I'll be joining the panel in London. 22 traceback as well. 23 Let's start again with Lou to talk about the 24 food safety issue overall. 25 MR. CARSON: The purpose of my talk right now

is to put the produce initiative which the President announced in October into context of the overall Food Safety Initiative. Last year in January the President announced the Food Safety Initiative and he convened a group of consumers, industry and Federal, State governments and government professionals together to produce a report to him in May which outlined the Food Safety Initiative.

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There are six areas that we hope to devote more attention to, the first one is surveillance. Surveillance is the system established by the Center for Disease Control called the food net sentinel sightings, and there are seven of those around the country in which active surveillance, surveys of hospitals, physicians and other health care professionals are conducted so that we can have an early warning system of foodborne illnesses and that information would get back to the Food and Drug Administration and the Department of Agriculture for us to follow up on to see whether our products were involved and to what extent those products contributed to the illness.

I need to let you know that within food net, as we improve that system, the number and the

frequency of foodborne illnesses reportings is bound to increase, but that increase is not necessarily that food is getting worse, it's simply that the system is improving. Previous to the Food Safety Initiative the system for surveillance of foodborne illnesses was a passive system, a system set up by the Center for Disease Control where State and local health departments sent in a piece of paper, which was then cumulated and then assembled into a data base and then someone finally evaluated it, a very slow deliberate process. As with foodborne illnesses it's very hard to link a foodborne illness of one individual here in Homestead with one up in Orlando. You may or may not know if these people actually ate the same food or if it was even a non-food related reason that they got sick.

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So the whole business of epidimiological science to establish what actually contributed to illness is improving. So we expect over the next few years to see an increase in the incidence of reports and we then want to have a system at the Federal and local level that can deal with that appropriately.

In addition to the surveillance system, we

have coordination and we have formed and tomorrow there will be an event, I think the Vice-President will be announcing, a foreign food illness outbreak response coordination group, MOU, between the States and the Federal governments that we would have a formal mechanism on following up on foodborne illness outbreaks.

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And again, the Food Safety Initiative has two roles, one, to reduce to the greatest extent possible the foodborne illnesses associated with foods, and secondly, to improve the infrastructure at the Federal, State and local levels to deal with those outbreaks and illnesses and to force the MOU and the surveillance system that CDC is establishing are two activities and initiatives that try to fulfill the improvement of that infrastructure.

In addition we are pursuing research and risk assessment. Again, there is much we do not know about microcontaminants in food. By and large the science is well established in the clinical setting, in the hospital setting, taking human fluid and assessing those for those microorganisms, but there is very little science, methods, how to sample on foods. It's very difficult. Each food is a different environment for that microorganism. Some microorganisms flourish in certain foods, others do not. And it's very difficult to make extrapolations or too broad generalizations on that. So there are ambitious research programs, both within the Department of Agriculture, Food and Drug Administration and other Federal agencies, likewise, and industry, to answer many of the fundamental questions so that we can provide specific guidance where appropriate.

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Education, we have entered into a public, private partnership with a number of industry members, consumer groups and Federal agencies to promote the Fight-Bac campaign. Fight-Bac is an attempt to educate retailers, food handlers and consumers that they play a large role in providing safe food at the table. We are not only focusing at the farm level, we are focusing at every stage from farm to table, and the delivering of food to the U.S. consumer in getting the message across that each level plays on important part in ensuring that food is safe.

Hence, with education we are trying certain educational messages, we are conducting research in that regard to see how consumers react. We have tried that with seafood, about seafood toxins. We've tried that about other foods. Some time people just turn off, they won't even pay attention to it or that message will not change their behavior, and we are trying to learn what will change their behavior so they are more aware and then make a conscious decision rather than an unconscious decision as to whether they are going to have a certain behavior or not.

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And lastly is inspections, under inspections we hope to increase inspections as we learn more about how to do those inspections. What is different within the Food Safety Initiative than we have in others? We are moving from a chemical hazard to a micro hazard framework. In chemical hazards one can be relatively assured as you sample a food product, if you sample ten percent or two percent, you have a general understanding of what's in that particular lot. With microbe contamination you do you not have that certainty. In the case of Cyclospora we know that as few as a few berries made people ill. Well, if a few berries made people ill, how can we sample all the raspberries from whatever source so that we can assure that there is no Cyclospora.

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Likewise, the research is not there for us to fully recover that parasite from that food product. Hence, we need to do additional research so that our investigations, if we do get additional resources to conduct more, actually have a basis on what to look for. Currently we look at sanitation practices, but in large parts microorganisms are not necessarily visible. You do not know when a food product may or may not be contaminated, hence the science is very important for us to proceed in an appropriate and deliberate and informed manner.

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Within the Food Safety Initiative, Food and Drug Administration, Department of Agriculture and others are going on on many -- going along on many different fronts. We are trying to make each contributor to the farm, the table, continuum aware of microhazards and how they must deal with them. And it's very important that we have this awareness and we get this science as soon as possible to respond to these foodborne illness outbreaks.

So by and large I believe the Food Safety Initiative really is trying to change culture, it's trying to change understanding of the food system, it's trying to make people more responsible for their putting products on their table. Consumers

also have a responsibility, it's not simply with the producers. Consumers must take care as they put food on their table and that's what the Fight-Bac campaign is about. In order to you must keep foods chilled, if they are to be chilled, must separate so you don't cross-contaminate and consumers, retailers and others need to be aware of that.

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So the message I can leave with you is we are not simply focusing on the farm level within the Food Safety Initiative and the produce initiative, we are trying to target each and every level and we are trying to get the appropriate messages to those constituents so that there will be a difference. Thank you.

MS. PEAL: If I may, and I've calmed down, sir. Mr. Carson, why don't you as the FDA have the same authority to recall bad products as the USDA does with meat and poultry?

MR. CARSON: The point raised by Ms. Peal was why don't we have the same authority as the U.S. Department of Agriculture on recalling products. I think you'll be surprised to know that Secretary Glickman has proposed recall authority for the Department of Agriculture because he doesn't have

the full extent that he thought he had either. Neither agency has full recall authority. Ι think Mr. Tolen can probably talk about cases here in Florida of how we actually do it, but by and large we rely on industry to recall that product because we do not have the legislative authority to require Congress to give us that legislative authority to do that. We have in the past proposed a number of legislative remedies to this, to date we have not received that authority. So by and large right now it is a handshake between the Federal government and industry when we find a problem, and by and large industry does respond to recalling products, but there are -- at points in time there are difficulties, and again much of that has to do and we tried to address that in our traceback system, that not all product is properly marked so that it can all be recovered easily.

In the case of fresh produce you know there's a large amount of repacking and commingling of products, raspberries are little raspberries. You've seen stickers on apples, but it's not easy to put stickers on raspberries and things like So there are some institutional difficulties that. in doing that, but nonetheless we would recommend

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that we do so in our guide that industry take appropriate measures so that we can retrieve or locate their products when we find that there's a problem and recall it.

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But the short answer to your question is we do not have the legislative authority to do so.

MR. DERSTINE: I'm Wayne Derstine, Florida Department of Agriculture and Consumer Services. Ι appreciate the opportunity to address you as far as enhancing food safety through our cooperative programs. The safety of food supply continues to command public interest. As you can see today the issues are many and they are varied, included but not limited to environmental contaminants, pesticide residues and, of course, microbial contamination. New situations and issues prompt discussions about the scientific evidence, public perception, necessary control measures and appropriate claims and labelling actions.

The interplay of legislative, regulatory scientific, social and political forces is evident with every issue that comes before us as far as food safety. Certainly government plays a major role in guarding the safety of the food supply through a variety of laws, regulations, standards,

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guidelines and control measures.

In addition, the food industry plays a critical role in helping to control food hazards. Our levels of industry adopt quality assurance and quality control programs that reflect industry's standards, company standards, consumer expectations and government regulations. In addition, consumers have a responsibility for food safety.

Everyday a consumer, and I know each one of you makes decisions for your family to ensure the safety of each one of your family members, therefore, we can say that it's certainly a cooperative effort. It's a partnership with consumers, with industry and with government to support food safety.

As far as the State of Florida, the Department 16 17 of Agriculture, some of your perspective as we see 18 them from the food safety issue, we have certainly 19 seen an increase consumer awareness of food 20 That is due to consumer education, the safety. 21 media and various other sources. We certainly 22 encourage the labelling, the coding, the tagging of 23 products to help us in the traceback that's already 24 been mentioned. We go through a lot in trying to 25 ensure that when we have a foodborne illness

1 MR. GOMEZ: But they are also coded. 2 MS. GILLEN: Just on the point of traceback 3 and how important it is, what efforts are being 4 done by USDA to be sure that produce is in correctly labelled boxes. We found many occasions 5 6 here where produce was put in boxes and said USDA 7 inspected, and one example is carrots used being 8 poured from a bag that said produce of Mexico, does 9 that bother you? 10 MS. NIELLA-BROWN: Michelle, excuse me, let's 11 try for now to keep the questions to the question 12 and answer period and limit it to the draft guide, 13 which is the purpose of this meeting, and I'm sure 14 if you want they will be happy to do one on one 15 interviews with you later on. 16 MS. GILLEN: That's fine, but I'll just finish 17 up with the gentleman now. It's just in the larger 18 picture I have formally requested interviews with 19 the government for six months and not been given 20 those interviews, so forgive me for wanting to ask 21 those questions today. 22 MS. NIELLA-BROWN: I understand but --23 I was not allowed to ask either MS. GILLEN: 24 the USDA or FDA for interviews. 25 MS. NIELLA-BROWN: What we are trying to do

1 today is gather input from the audience. 2 MS. GILLEN: I understand, but let me just 3 close on that one point, sir. Is that acceptable, 4 the fact that we have found examples of produce 5 being put in boxes and saying USDA inspected when 6 indeed the produce came right out of packages that 7 said produce of Mexico? 8 MR. GOMEZ: I'm sure if it was put in those 9 boxes that said USDA inspected, and if something 10 was put in those boxes, it was either USDA 11 inspected or it's illegal. 12 MS. GILLEN: What I'm saying is, it certainly 13 appears to be illegal, does that concern you and 14 what effort --15 MR. GOMEZ: Yes, it does definitely. 16 MS. GILLEN: What efforts can be done, will 17 be done to correct that? 18 MR. GOMEZ: I think Lou addressed some of that 19 before. Our resources are not up to what perhaps 20 we think they ought to be. We are doing the best 21 we can with what we have. We have requested 22 additional inspections and so on and so forth. 23 That's my answer, we are doing the best we can with 24 what we have at this point, and we are concerned. 25 That is a certain, sure.

MS. NIELLA-BROWN: We now need to move on with the agenda, and I believe Lloyd Harbert will be addressing the audience at this time.

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4 MR. HARBERT: I was hoping we were going to 5 break for lunch, but I guess I don't get off that 6 Hi, I'm Lloyd Harbert, I'm with the easy. 7 Department of Agriculture, Foreign Agriculture 8 Service and I work in an area called International 9 Trade Policy, so essentially my office is involved 10 in the foreign side of the trade component of the 11 Food Safety Initiative. I just thought for some of 12 you that weren't aware of how the Foreign Ag 13 Service is structured. Essentially they have 631 14 personnel in Washington, D.C., about 110 foreign 15 service officers in overseas covering 133 16 countries, plus an addition 12 buy/trade offices 17 that are involved in promoting food products in 18 foreign markets. Trade offices principally being 19 some of your larger commercial markets.

Essentially the mission FAS has is it's involved primarily in trade promotion, also providing market intelligence and also technical assistance and training to foreign government. And the reason I wanted to point that out is so you get a sense of why we've been working with the Food and

Drug Administration in putting in place the President's Food Safety Initiative, particularly as it goes in regard to produce, the produce initiative. I think-- the first point I want to stress is it really is a government effort across the government, it's not just within one department, it isn't just Health and Human Services, it's not even just the Department of Agriculture and Health and Human Services, it's involving State departments and others in the formulation of good ag practices documents. For example, we've got those out to all the foreign government embassies and also to our embassies in the field to get comments back on those specific practices.

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16 I think the other thing that I wanted to emphasize, too, is that our trade partners 17 18 particularly need to see the President's Food 19 Safety Initiative and particularly the initiative 20 of our produce as a public health initiative, not a 21 trade initiative. I think that was particularly 22 worrisome, I think, for us in a trade agency at the 23 beginning of this, because a lot people saw it as a 24 way to shut down imports into this country, and 25 that could come back to bite us. Just as much as

our consumers like to think we have the safest food supply in the world, I can tell you other countries like to think their food supply is the safest in the world. So we'd have to have a balance as we move forward with that.

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6 I wanted to show just a couple of quick 7 overheads because I think it draws attention where 8 public perceptions are in terms of food attributes 9 and what is a serious hazard. We've actually done 10 this more in regard to an issue we are addressing 11 now on biotechnology, not necessarily microbial 12 contamination, but as you can see, it depends on 13 consumer's perceptions, particularly microbial 14 contamination now even exceeds pesticide residue. 15 Now that may be because popular press and media 16 picked this up, but it clearly is on the minds of 17 the American consumer and also on the minds of 18 European consumers in terms of serious hazards, 19 bacterial contamination, pesticides and some of the 20 other issues. But I just wanted to draw quick 21 attention to that because I think just, again, you 22 have to look at these issues, not just in the 23 context of the U.S., but also globally. 24

The next point I wanted to make here is, FAS is currently working with the FDA trying to define

our international efforts. At presently we are currently meeting on a bi-weekly basis, every Thursday, and also to design exactly how we can go about building the scientific basis that Lou drew attention to. We have a long history or working on pesticide type issues overseas, whenever there is decontainment actions and we need to do follow up with foreign governments, we -- our field officers will work in cooperation with FDA officers when they would actually physically come into a country and work with the host country government. We don't like to use our foreign service officers as sort of compliance or enforcement officers because they are working in embassies trying to promote agricultural trade in general, not specific issues.

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16 Now, the programs that we are currently 17 working with, when we try to reach out to foreign 18 governments and work with them, the first one is 19 the Cochran Fellowship Program, and they are 20 essential bringing in foreign government officials 21 into the U.S. to get specific training. Right now 22 we are designing some specific training modules 23 around food safety, around microbial contaminants. 24 In the past we've done similar things in the area 25 of toxicides. We also have an emerging market

program that provides technical assistance to developing countries, and finally we have a scientific cooperation program which funds collaborative research protects and scientific exchanges. And that's the areas that we are going to be concentrating on, particularly as we try to look at microbials and get at some of the issues that Lou mentioned where we just don't have good information at present, not just here domestically but internationally.

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11 As we look forward, right now we are looking 12 basically in four general areas in the international area. First is increasing awareness 13 14 of how our own food net surveillance system is 15 working, because one thing that I think was drawn 16 attention to by some of earlier speakers, now that 17 we have expanded surveillance capacity we are going to have more outbreaks reported. 18 That's not an 19 indication of the food supply in the United States 20 and the safety of this food supply is in jeopardy 21 or deteriorating, but the problem is that that 22 information gets picked up in the media and 23 publicized, the foreign governments keep coming 24 back into my office and saying, well, can you give 25 a guarantee that your products are safe or as we do

recalls here in the United States, the first question the foreign governments ask us is, did you ship any products to our market? And so we are improving the systems we have and transferring that information on a very timely basis back and forth to governments.

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The other thing that is secondary that we are working on is improving our risk assessment methods 8 for microbial contamination, and the reason we are focusing on that particular area, we've had a lot of experience looking at microbial contamination on 12 red meat, seafood and those areas, but not so much in the area of produce. It was only very recently that you'd even get trade associations or producers or other groups to acknowledged that possibly microbial contaminants could appear on produce because we, in fact, hadn't had any tracebacks that really drew attention to that as an imperative That's only been fairly recent in time concern. that we'd had this CDC information pointing out that that is a potential area of concern.

The third area of which I touched on briefly is just improve the risk communication. I think that, again, that's that issue of as we report more foodborne illness outbreaks, how we communicate

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that internationally. And then finally I think in the facilitation of the development of international standards or guidelines, one of the key components in facilitating trade is having international standards that we all adhere to. Right now there are not good international standards developed around microbial contamination of trade -- international trade and food sups. And why that becomes a concern is it gets some of the very specific questions that we raised here a little bit earlier, is that two percent inspection rate good enough? How about twenty percent? Why not fifty percent? If you really want to stop trade you can take the greater approach and say 100 percent inspection, and we had to get into rather lengthy discussions about that. Okay, what is the specific hazard? What is the particular microbial problem that you want us to address here? Why do you think 100 percent inspection rate is justified.

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Now, particularly they can adopt the 100
percent inspection rate for a period of time and
still not find any hazard. Then you have to make
the argument back 100 percent isn't justified,
maybe you should lower that inspection rate. So
that's the area that we are working with the Food

and Drug Administration and other agencies to help develop that international agenda. I know that it's 12:15, but we are probably going to try to have just a few questions before we break for lunch. I just want to thank you for your attention and I hope that kind of broadened the scope. Thank you.

MR. TOLEN: I'm going to talk about tracebacks, but let me give you a choice. I need about maybe five or seven minutes to do that, you can request if you need a break now, go to lunch and when we come back go ahead and do that or go through that area and break for lunch, what's your preference?

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MS. GILLEN: Continue.

16 Continue, okay. Let's talk about MR. TOLEN: 17 tracebacks first. I'd like to do that by telling 18 you a little story, perhaps an analogy. All the 19 names are made up to protect the innocent and the 20 guilty. This is a story about a gentleman down in 21 Peru, his name is Peter. He's a goat herder. He 22 has about 20 goats, a broken down truck and he buys 23 and sells goats on his five acre farm. But to make 24 a little additional money he also has 100 pear 25 trees, so Peter raises pears in Peru and he picks

these pears, puts them in his trunk and takes them to Paul. Paul cartons these pears up and he ships them to Miami.

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Mary in Miami runs a kitchen and manufactures airline meals, and she buys a pallet load of Paul's pears from Peru and she makes a mixed fruit salad, which she then marries with a chicken salad and puts it on a platter. She also makes ham sandwiches, which have garden salad and she puts them on the platter and she sells them to American Airlines, which puts them an a flight from Miami to New York.

On that night are 350 people, about half of them eat the ham sandwich with the garden salad, the other half have the chicken salad with the fruit salad. Half the people get sick diarrhea and vomiting. So this is reported to a variety of Federal, State agencies and they conduct an epidimiological investigation as to what caused the problem. In that investigation they determine that the people who got sick all ate the chicken salad with the fruit salad platter and those who ate the ham sandwich with the garden salad did not get sick, so that helps traceback the information as to what may have caused this problem, which they want

to do not only to prevent the problem but what else may be out there that may be contaminated to cause this illness.

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Eventually they traced those meals back to Mary's kitchen in Miami, and they go in and collect some samples there of the variety of ingredients of the meal of the manufacturer. The source of the suspicion is the chicken salad because chicken is a hazardous substance in its own right, but lo and behold they don't find any problem with the chicken and when they go back to the kitchen they find Mary still has a pallet of pears from Paul in Peru, and they take a sample of that and lo and behold find salmonella on some of those pears and the same depreciation is in the fecal material and the blood from the patients who were hospitalized from the illness.

18 Now, if they had not found salmonella in the pears, the assumption could have been made perhaps 19 20 that somebody in Mary's kitchen could have been 21 ill, could have had a boil, could have contaminated 22 fruit salad that was manufactured, but since they 23 found the salmonella in the pears the assumption now is we trace this product back to Peru from 24 25 which it came.

We know that the pears came from Paul, who cartoned them up, but unfortunately there were no codes on the pears from Paul, so we don't know which of the suppliers contributed those to Paul, those pears to Paul. But if it had been properly coded so that Paul could trace those pears back to Peter who picked those pears off of the ground where his goats had gone to the bathroom and put them in his truck, which he hadn't cleaned since the last time he transported goats to the market, we might have been able to trace that back to the actual source of contamination.

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13 The point I'm going to make is that the 14 regulations, there's about three or four pages 15 devoted to tracebacks and the importance of 16 properly identifying and marketing. You mentioned, 17 Michelle, orange juice and coding. Theoretically, although there's a legal requirement to do so, at 18 19 least in the FDA regulations, you'll see usually on 20 most manufactured products that you buy in a 21 package in a supermarket a series of codes and most 22 manufacturers will be able to interpret that code 23 and tell you the date it was made, the manufacturer 24 plant, the line it was made on, the shift it was 25 made on, so if we find a problem with that orange

juice that you mentioned and indeed it is contaminated, the manufacturer says, oh, find out what the problem was, they can say that was made on the A shift using this source of ingredients and that went to these locations. We need to not only solve the problem when you identify it, but we need to go back and recall the merchandise that may still be out there making others ill. That's the whole point of tracebacks.

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10 If you don't have a traceback system in place 11 and you don't code it -- now what happened in the 12 case of the pears of Peru, we know that we had a 13 problem with Peruvian pears but only from one 14 shipper, so the safe thing to do is say, we don't 15 want to ship any pears, we don't want to receive 16 any pears from Peru and we indict the entire 17 Peruvian pear industry because we can't trace that 18 back to the specific source.

So one of the advantages to a shipper is to make sure they know where that came from and it's also an advantage to the industry from which those products are shipped, because they are able to pinpoint the actual source and not indict the entirely industry because we can't actively figure out where that came from. So the whole point of

the traceback is to put numbers on there, as you heard Martha Roberts mention this morning, some people can even code this back so that they can trace that back to the individual shipper. I'm sorry, individual picker. The picker may have had sores on their hands, may have a cut that got infected, so every item that they touched is a source of contamination. And if that product gets washed somewhere they multiply that contamination and everything that goes through the same wash water picks up that pathogen.

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12 So it behooves us when we see that in the 13 quidelines we've set up a traceback system which 14 allows you as the manufacturer, you as the grower, 15 you as the producer and us as the Federal agency to 16 be able to find the source of that contamination 17 and take steps to not only fix that for future use 18 but also and more importantly to make sure that any 19 other product from the same source on the market 20 may be removed so that we don't continue to spread 21 the illness or the infection that may be causing 2.2 the problem.

> Take a close look at those three or four pages of the guidelines there and it's appropriate for your operation to consider that, and admittedly

it's different for every kind of operation or may be. If you pick potatoes and they go through some wash water and are sorted by size, then my potatoes get in a whole bunch of different cartons. If I'm a picker of raspberries, you put the raspberries in a carton, that carton is shipped and it's only my hand who touched that so you need to look at in light of the kind of operation you have and how things might be handled.

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If you have any written questions give them to Frank. Let me ask this question so everybody understands what it is. The question, what measures can the initiative introduce to make sure good agricultural practices are actually followed by foreign producers and just not simply ignored? Would farm certification/inspections randomly performed fall into this picture?

18 Lloyd, do you want to answer that question? 19 MR. HARBERT: That's a good question. As I 20 think it's been suggested here the guidance is a 21 voluntary guidance, it's not mandatory. However, 2.2. having said that, I can tell you all the suppliers 23 of fruits and vegetables to the United States are 24 very interested in this initiative. We've received 25 numerous requests for any kind of direct

involvement either having our teams come out and work with them or with their producer, grower groups and actually taking a hard look at good agricultural practices documents.

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We've had several countries approach us, Mexico being one, but several additional countries throughout Latin America, expressing desire to be involved in any pilot surveys that we might do of field surveys with production practices. So I guess my point would be, I don't think, you know, this is such an important area for countries that they are going to simply ignore the practices. They do not want to see their exports in any way have a food safety or a foodborne illness outbreak being traced back to them.

16 One of the things that came out is, I think we 17 recently had some meetings with the Center of 18 Disease Control and CDC view collaboration 19 historically has been when they are in the midst of 20 doing traceback, that's when they collaborate with 21 foreign governments and increasingly the foreign 22 governments are saying, can you collaborate with us 23 before the fact. Now, let's make sure how we can 24 improve our own system, surveillance systems for 25 foodborne illness outbreaks in other countries.

I think it's an evolving process and I think the good agricultural practice document is a work in progress, and it's becoming an educational view from not only here in United States, but internationally, and at some point in time that good agricultural practice document may find its way and become an international guideline.

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8 MR. TOLEN: As we move more and more into a 9 global marketplace, there's more and more concerns 10 on countries who have a big chunk of the American 11 market to make sure that the produce coming from 12 their countries meet our requirements. It's too 13 much money involved not to have been interested in 14 that activity.

MS. GILLEN: In terms of dealing with foreign countries, has there -- has any of your staff per se ever visited any of the farms, specifically in Mexico, and specifically investigated concerns regarding questionable sanitation, lack of handwashing facilities and bathrooms?

21 MR. TOLEN: Did everyone else in the room hear 22 that question?

MS. GILLEN: Given your responsibility on the foreign area, you are saying in countries such as Mexico actually are proactive to work with the

United States regarding standards of food safety, has anyone on your staff or do you have any information brought back independently other than taking their word for it? For example, I myself visited there and went to many farms where there were actually no handwashing facilities, very few toilets if, any on, some farms. Is that information that you have been able to investigate or concerned about or have at all independently, you know, looked at or is that something totally off the radar screen?

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MR. HARBERT: For my specific agency within the Department of Agriculture Foreign Ag Service, we do not have a public health and safety role, but what we are is the principal representative of the Secretary of Agriculture in that country, and so for that role we have interactions like the Food Safety Inspection Service on red meat and poultry.

19In addition, we've interfaced with the Food20and Drug Administration and their staff to come21down to arrange field visits. But our staff per22se, because we are economists, scandalous speaking,23and the last thing we want is an economist going24out and trying to talk about microbial25contamination, I can tell you that for a fact.

We are strengthening that effort, that's why I was trying to draw attention to the issue on pesticides. That was an area that there was involvement, but our officers physically did not get directly involved. What they do is arrange for incountry visits, identify which were the key government officials to work with.

MR. GILLEN: But USDA, unlike the meat and poultry, who are not responsible for the food safety element regarding --

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MR. HARBERT: Right, we draw on the regulatory agencies back in the U.S. and then facilitate carrying out their function in that country, we don't but have that regulatory authority.

15 MS. GILLEN: That regulatory authority does 16 belong to the Food and Drug. Mr. Tolen, maybe you 17 can enlighten me on something that I've been trying 18 to get to the bottom of, and the guidelines make 19 some reference to difficulty in some testing. Tell 20 us specifically when an FDA inspectors go to 21 facilities where foreign produce has come in, give 22 us the list of exactly when the inspection does 23 take place. What they are inspecting for? 24 MR. TOLEN: Is your question in reference to 25 the foreign firms or when the produce hits the U.S.

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MR. GILLEN: Both.

MR. TOLEN: Let me address the foreign firms first, because we have no authority, as we speak, to be in foreign countries inspecting foreign firms.

MS. GILLEN: I'm talking about once it hits the United States, not before that.

9 MR. TOLEN: Let's take Miami, specifically, 10 because this is a ideal location to talk about 11 that. In Miami we get some 800 entries or 12 thereabouts a day of products that are regulated by 13 the Food and Drug Administration. We have about 20 14 people to collect samples and look at these 15 entries, so we have to do as I call it triage. We 16 have to make conscious decisions about the products 17 that we look at and microbiology problems in 18 produce is just one of the many concerns we have 19 about the food supply, we are concerned about 20 pesticides in foreign produce, we are concerned 21 about heavy metals in seafood, we are concerned 22 about decomposition of seafood. So there are thousands of combinations of products and problems 23 that need to be considered and obviously you can't 24 25 look at everything for every possible contaminant,

so we have to make some decisions about what we would look at and only a small number of those 800 entries per day are selected for further consideration.

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When that selection is made, and in part that's done by computer based on prior the history of a particular product, prior history of that particular country, even prior history of that particular importer, one of our folks will go to that importer and he will collect a physical sample of that merchandise. Let's say it's a product for pesticides --

MS. GILLEN: Let's not talk about pesticides since the guidelines don't address pesticide problems, let's deal with --

MR. TOLEN: We have a few guidelines for microbioligical hazards in produce.

MS. GILLEN: That's what I'm trying to get at,
just tell us what, if any, micro -- I can't
pronounce it as well as you do, what micro --

21 MR. TOLEN: If we find a disease causing 22 pathogen in a product, then we would normally take 23 a, we call it a detention action, we would detain 24 it, but let me give you --

MS. GILLEN: Here's just my question, what are

1	the pathogens the FDA inspectors collect samples to
2	test for, what are we actually testing for in this
3	country?
4	MR. TOLEN: That's going the depend on what
5	the product is.
6	MS. GILLEN: But give me the whole let's
7	start this way. Do we test for E-coli?
8	MR. TOLEN: We test for E-coli in products
9	where that may be a problem.
10	MS. GILLEN: But what you are saying is if FDA
11	inspectors might suspect for some reason a product
12	is tainted with E-coli, they will they do send
13	samples to laboratories to confirm or
14	MR. TOLEN: Yes. You used the term if we
15	suspect, if we had reason to be concerned about a
16	particular product, then obviously we would collect
17	it for that particular reason. Our laboratory
18	happens to be in Atlanta, so that sample would then
19	be shipped to Atlanta for analysis and a decision
20	be made on whether that product will get into this
21	country or not based on the results of that
22	analytical evidence.
23	MR. GILLEN: Now
24	MR. TOLEN: Let me say this, it's important
25	for me to say this. In many cases the

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microbiological testing may take two weeks.

MS. GILLEN: Right.

MR. TOLEN: So are we supposed to hold up the entry of all these products for weeks on end with a perishable limit while we run all these tests, and the answer is generally, unless we have a strong reason to suspect that that particular lot is contaminated, in all likelihood we would not hold perishable products for more than a day pending the analytical outcome. So we are trying to balance the movement of cargo with our consumer protection mission.

13 MS. GILLEN: Does FDA test for Cyclospora? 14 We, and Lou may be able to answer MR. TOLEN: 15 this better than I can, we have a method for Cyclospora, but as you heard earlier at this point 16 17 we have not been able to find any Cyclospora. We 18 suspect it's there because we see evidence that 19 epidimiologically we are tracing back to some 20 products. I'm not a laboratory person, I'm not 21 sure how good that methodology is, but we continue 22 to still look for Cyclospora organisms in this 23 product which we suspect epidimiologically that 24 they may exist.

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MS. GILLEN: One last question. Do you

1 believe that -- do you agree with the policy that 2 allows distributors and manufacturers to choose 3 their own laboratories for FDA testing? There was criticism of that in the GAO report, which actually 4 made reference to some cases where bogus product 5 6 was actually taken to the labs? What's your 7 opinion on that? Do you think that should be 8 changed? 9 MR. TOLEN: Let me answer that last question because we have to break for lunch. 10 11 I think that you asked the question 12 incorrectly. Your question was about allowing 13 importers to choose their FDA laboratories? 14 MS. GILLEN: Individuals --No. No. No. 15 MR. TOLEN: Private laboratory? 16 MS. GILLEN: Exactly. 17 MR. TOLEN: Here's the choices we have to 18 make--19 MS. GILLEN: Just tell me, do you agree with 20 the policy or not? 21 MR. TOLEN: Let me ask you this as a consumer, 22 would you prefer to have the same test by a private 23 laboratory of the importer's choice or not at all? 24 Because that's the question you are faced with. 25 MS. GILLEN: Why?

1 MR. TOLEN: Because there's simply not enough 2 The Federal government, particularly resources. FDA, to sample every product, for every attribute 3 4 in FDA facilities. MS. GILLEN: So you are saying the choice for 5 6 the consumers today is either allow the 7 manufacturers or distributors to pick their own lab 8 or not get anything at all? 9 MR. TOLEN: What I'm saying is that in 10 addition to the analysis that we perform in FDA 11 laboratories, we also have programs which say to 12 the importer you may opt to use a private 13 laboratory of your choice to analyze in lieu of 14 The point being here is that more samples ours. 15 getting analyzed in favor of the consumer than it 16 would be if we just used our own facility, I think 17 that's the bottom line. 18 Now, it's true that on occasion there are 19 situations where that privilege is abused and we 20 deal with that when we find it, but the bottom line 21 is, you as a consumer, if we can sample five 22 percent and test it or we could have 35 percent 23 tested in a combination of Federal and private 24 facilities, which offers the better protection for the consumer? 25

It's our conclusion that by allowing some of this stuff to be tested by private laboratories that we are getting a better product on the market. We have had many instances where private laboratories have found things on the product and we've been able to take an action against it, which we would not have found on our own, since we didn't have the resources to examine that large a number of units.

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10 So the bottom line answer to the question is 11 yes, I believe in that and yes, there are 12 occasional abuses of it, but the bottom line is I 13 think the consumer is better protected with a 14 program of that nature.

15 I'm sorry, we are way beyond 12:30. Let's 16 take a lunch break. We are going to short-circuit 17 it just a few minutes. If you can be back at 2:00 18 then we'll take more questions and then continue 19 with rest of the program. Again, I apologize for 20 all this. We want to make sure that you as 21 industry representatives have an opportunity to 22 have input here for the process which we are here 23 So again, if you have questions you would for. 24 like to come to the podium with, after lunch please 25 feel free. If you have questions you'd like to

write down, by all means.

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2 Thank you, we hope to see you back after lunch 3 to get your feedback and input to this process. (Thereupon a lunch break was taken in the 4 5 proceedings, after which the proceedings 6 continued as follows:) 7 MR. TOLEN: Take your seats, we'll try and reconvene, please. Thank you all for coming back. 8 9 Sometimes we have these meetings and come back from 10 lunch and no one is here, so we appreciate you 11 coming back to participate in the second half of 12 the program. 13 Before I turn the program back over to Estela 14 to introduce our first afternoon speaker, let me

15 ask whether there are anymore of these forms that 16 you might have filled out during lunch break that 17 we should ask those questions and get those 18 I'm surprised you are so quiet, this is addressed. 19 your opportunity. The press hasn't come back from 20 So it's an opportunity here for somebody lunch. 21 else other than CBS. Are there any questions from 22 the floor?

MS. NIELLA-BROWN: I also wanted to make the
 clarification if some of you do not feel
 comfortable enough stating your question or writing

your question in English and you want to do it in Spanish, feel free to do so and we will translate the question and the answer for you.

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MR. TOLEN: Okay. Let me turn the program back over the Estela to introduce the first speaker of this afternoon.

7 MS. NIELLA-BROWN: Okay. The next session on the agenda is the guidance document presentation 8 9 and working session, and Dr. Michelle Smith will be 10 in charge of this next session. Dr. Smith is an 11 interdisciplinary scientist at the Food and Drug 12 Administration, Center for Food Safety and Bad 13 Nutrition. She's part of the Food Safety 14 Initiative team and she's the author of the quide 15 to minimize Microbial Food Safety Hazards for Fresh 16 Foods and Vegetables. So take advantage of 17 Michelle this afternoon and ask as many questions 18 as possible.

19MS. SMITH: Thank you. It's going take me20just a minute the get set up here.

MS. NIELLA-BROWN: Michelle is also going to show the slides in both English and Spanish.

MS. SMITH: Estela, if you can turn on both those slides projectors. I took a few notes this morning during other people's presentations just to

remind me of some of the points that I'd like to make in way of introductory remarks.

One of the points is that Doug Tolen and a number of other people said that this is your opportunity to let us know if you have any problems with the guidance document, I'd like to expand on that. If there's anything you like about it, feel free to tell us also.

To put this document in perspective, it is a guidance document and there are a number of significant gaps in our knowledge as to pathogen survival in the field and on fresh produce. And there was some discussion or concern, I think, about the agencies just continuously studying and studying and studying and not taking action, and I'd like to say at this point that that's one of the reasons that this is guidance.

18 The purpose of this document is to increase 19 awareness about potential sources of contamination 20 for fresh produce and to try and encourage the kind 21 of action that may minimize the hazards that are 22 possible in the field in packinghouse environments. 23 I consider this a very positive step within 24 conducting a number of tours of farming and 25 packinghouse operations. Everything that I've seen

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so far, people have already taken their own steps and they are making very conscious efforts to make their operations as good as possible.

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At the same time some of the comments that we got on the working draft said thank you very much for putting this out there. There are some things in here that we hadn't thought about, and so what we are trying to do, much of this may have been common sense that people are already following but also to increase awareness of all of the potential sources of contamination and maybe get people to look a little harder at their operations and see what factors they may have control over that they hadn't addressed yet.

15 The way that I was thinking about handling 16 this, this afternoon's working session, is to go 17 through the document and present some of the types 18 of recommendations that we've provided on a section 19 by section basis, and pause at the end of each of 20 those sections for any comments and questions that 21 you may have on those particular topics before 22 moving on to the next session. What I'm trying to 23 do now is start in the same place.

> In the guidance document, based on current sound science and knowledge of FDA, USDA and a wide

range of technical experts in other Federal agencies and at the State level, we have identified common potential sources of contamination in the agricultural and processing or packinghouse environments. Those areas are water, manure or biosolids, worker hygiene, field facility sanitation, and transportation.

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The first area that we look at is water. The source and quality of water dictates the potential for pathogenic contamination, and water is a concern in two regards. First, it's a direct source of contamination if pathogens are present in the water sewers, and secondly, as a vehicle for spreading localized contamination in the field or packinghouse.

16 In addition, and this is one of the factors 17 that makes recommendations in the field environment 18 particularly difficult, it's important to note that 19 if the pathogen on produce, once the contamination 20 occurs, survives until harvest and it's not 21 eliminated by any of the post-harvest handling 22 practices such as washing, such that it survives 23 until it reaches the consumer, then it can cause 24 foodborne illness. The tricky part is how long can 25 pathogens survive in that kind of environment?

Many pathogens may die off in the field within a number of days, so the pathogen survival factor needs to be overlaid with a lot of other factors that we'll get into in a minute. These slides just show some of the pathogens that may be carried by water.

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7 The other important thing to remember is that 8 even small amounts of pathogens can cause illness. 9 No one knows for sure what proportion of 10 contamination of produce originates on the farm or 11 in the packinghouse environment, and on top of that 12 many neighbors share a common watershed. Operators 13 may have limited control over some of the factors 14 that impact on water quality outside of their own 15 boundaries.

16 What we are doing is we are urging growers and 17 packers to assess their own situation and put in 18 place appropriate good agricultural or good 19 manufacturing practices in those areas over which 20 they have some control. Water quality needs vary 21 with when and how the water is used, as the degree 22 of contact between water and the animal portion of 23 the crop increases, so does the need for high 24 quality water. For example, some crops use 25 overhead spray irrigation, other crops use drip

action levels to tell growers when the quality of water has reached a point where it should not be used on the crop.

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One of the areas in the working draft document that we got a lot of comments on was when we had recommended that growers perform microbial testing of their water. Comments were concerned about what microbe to test for, what to do, what the levels that would require them to take action would be. State officials that we were working with were concerned about what to do or what to recommend to people. We have pulled back in this document from the recommendation that agricultural water be tested for microbes on the basis that at this point in time we don't have action levels.

16 One of the things that I noticed on site 17 visits in Florida about a week or two ago was that 18 the agricultural water uses are very different for 19 different kinds of crops. For some crops you may 20 have irrigation one time during planting or plant 21 establishment, and then no scheduled irrigation for 22 the rest of the growing season. For some other 23 crops we saw situations where irrigation proceeded 24 right up until a day or two before harvest on a 25 regular basis.

What we have done in the guidance document now is shifted our attention from suggesting microbial testing when we didn't have any further solid advice to offer, to the recommendation that people take a good hard look at their situation and at their water sources and put in place practices to ensure and maintain water quality, and I'll introduce some of those practices in a minute, and then also refer people to local experts that would be more familiar with their individual operation and the water situation in their particular region.

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This slide shows some of the diverse water sources that may be available in an agricultural situation. Some growers have options as to what source of water they can use. When the options are available they may decide to use one source of water closer to harvest as compared to another source. In other situations people have a single source of water and they have fewer options.

In general, ground water such as deep wells and municipal supplies is less likely to be exposed to high level of pathogens compared to surface water. Now, this doesn't mean that ground water sources such as canal irrigation should not be used, rather it means that growers using surface

1 water may need to look harder at the good 2 agricultural practice to protect and maintain that 3 water quality. Some of the recommendations that we make in this regard include things like being aware 4 5 of current and historical land use and potential 6 sources of contamination for your water source. 7 On-farm sources of contamination may include things 8 like runoff from leaking or overflowing manure 9 storage lagoon or allowing livestock access to 10 surface waters or pump areas. Growers should 11 follow the good agricultural practice 12 recommendations in the quide to reduce or eliminate 13 any obvious sources of contamination. 14 Soil conservation practices such as sod 15 waterways and diversion berms may also help protect 16 water sources. Are there any questions on 17 agricultural water before we move on to processing I see one in the back. 18 water? 19 MR. MATTHEWS: When you talk about testing, 20 are you saying that you all are taking back the 21 testing section within the water? I didn't guite 22 understand that. 23 MS. SMITH: What we did in the working draft 24 is we looked at a lot of industry guidance 25 documents and we relied heavily on those industry

guidance documents. There was a diversity of recommendations in those documents. Some of them had simply stated that operators should perform microbial tests on their agricultural waters, and we put those recommendations in the working draft that we put out in November of last year.

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One of the things that we wanted to accomplish by putting that first draft out was to get feedback on the effectiveness and the practicality of the kind of recommendations that we were considering. The feedback that we got, not just from growers but also from other public health officials and technical experts within FDA and USDA, was that it's difficult to make that kind of recommendation when you don't yet have information on telling people what to do with the results of those tests.

In fact, at this point in time we don't even have solid recommendations for what you should test for. So what we have done, and one more thing I'll say, is that working with the National Advisory Committee for Microbiological Criteria for Food that best that that kind of test -- the best information you could get at this point in time is maybe yes, maybe no. That that information would not be definitive as to your water quality. It might tell you that your water might be okay, it might tell you that your water might be curable, but it's most likely to tell you that you really don't know for sure.

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Another problem is that with flowing water sources you could take a test at 10:00 in the morning and you could sample again at lunchtime and your water quality has changed because of some passing event upstream. So we have not eliminated the recommendations that growers test for pathogens in their agricultural water, but we think based on the lack of information specific to microbial testing, that it would be a lot more effective to shift your focus toward having people look at their situation and look for potential sources of contamination and either contain, reduce or completely eliminate those sources. In which case they've taken action that can have a long range benefit and that's where we rest right now.

We request that people with questions go to the microphone and please identify yourselves. This transcript will become part of public record for anyone who wasn't able to attend here today and also for the use of those of us who are trying to take this document to the next step, we'll have

your comments in writing. On top of that Camille has cards in the back if one would like to write down their question instead of give them. There's a gentleman here who had his hand up.

MR. WARREN: On the water, I'm an importer, distributor of product and also get involved in the protection of the crops. I can assure you back in Guatemala we tested our water for microbes. Every bit of out fruit is washed in chlorine, it's 100 percent good and safe and there's a great deal of saying that we don't do this and we don't know, we do. I have had my water tests at ABC Lab. It costs me two to five hundred dollars a test and it is being taken care of to the utmost.

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MS. SMITH: Thank you.

MR. WARNER: My name is Peter Warner, I'm also an importer. We did had a lot of questions on the use of chlorine in this issue, and questions like does chlorine --

MS. SMITH: Could I interrupt for just a minute? This is the end specifically of the agricultural water, that's the use of water in the farm environment.

24MR. WARNER: In irrigation?25MS. SMITH: In irrigation, for example. In

just a minute I'll get into what we've said about 1 2 post-harvest and that may be better. 3 MR. WARNER: Okay. 4 MS. PEAL: I'm going to show my ignorance, I'm 5 here again. I have a production question. Let's 6 take worst case scenario, somewhere in the world we 7 use irrigation that is horrible, it's got so much 8 pathogen in it that it's terrible, we grow the 9 product in it, and I know you are going to address 10 post-production, but you wash it with the most 11 beautiful, sterile water later. Now, is that 12 product going to be adulterated by that first 13 process even though you've instituted a wonderful 14 second process? 15 MS. SMITH: That's a good question. I think 16 this is a valid point to just mention one of the 17 other things that we've added to this version of 18 the guidance document. It's a list of principles 19 that are common to successful food safety 20 programs. The number one principle on that list is 21 that prevention is preferred over correction once 22 contamination has occurred. And so rather than 23 count on processes such as washing to get rid of 24 contamination that's present, we want people to

focus at every step during the growing, harvesting

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1 and post-harvesting and minimize hazards all along 2 the way. I see a follow-up here. 3 MS. PEAL: Sorry. What you are saying to me is --4 MS. SMITH: You can't, and I'll get into this 5 6 in processing, you can't count on that wash to 7 eliminate pathogens that may be present, 8 particularly pathogens like Cyclospora are very 9 difficult to get off of produce. Not all produce is amenable to wash treatments. Some of the 10 11 berries, for example, are very delicate and are not 12 It is the responsibility of everyone who washed. 13 is involved in food production to produce a safe 14 and wholesome product. If the use of really awful irrigation water 15 16 contaminates the crop and that crop is not 17 subjected to a treatment to correct the problem, then they have not fulfilled their requirements. 18 19 MS. PEAL: And I as a consumer would be 20 severely hampered in making sure that product is 21 safe no matter what type of cleaning process I use 22 because it already is pretty tough for me to get rid of it. 23 24 I want to just explain what we MR. WARREN: 25 Our water comes from the mountains. do. We have

reservoirs with five million gallons of water in it. We check our water in the reservoir before it gets to the place and the water is good, and we check it also, we take it and we send it to the lab before it is treated. In addition to that we wash it with chlorine. It cannot be any better. You are 100 percent safe.

MS. SMITH: Thank you again.

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MR. MATTHEWS: Charles Matthews, Florida Fruit and Vegetable Association. Michelle, we've had this discussion before and I agree with your sentiment that testing per se doesn't increase the quality or the safety of the product. And I say that primarily because our methods that we currently have to detect, even detecting organisms are somewhat weak, is that not true?

17 MS. SMITH: We do have difficulties in 18 detecting some microorganisms. We have 19 difficulties in detecting others when they are 20 present at low levels. The additional complication 21 is if you have, for example, a running water 22 source, then the quality of that water changes so 23 frequently that testing may not give you data that 24 is valuable.

Now, we have not said that testing doesn't

have application in some situations. In a reservoir situation, for example, you've got a lot more of a static water quality situation and testing may be something that's very worthwhile to do there or to test both the quality of well water in some situations.

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MR. MATTHEWS: I think until we can recognize what is important, until we have a method that is, you know, within acceptable range, maybe 90 percent correct, whenever it's done, that really testing is more of a -- I don't know what to say, but it's not a waste of money, but yet it is applicable in certain situations. But for buyers to require testing before they can ship to a certain location or a grower can ship is really kind of a waste of money unless you are specific about what you are looking for.

18 MS. SMITH: I think one of the things that 19 Charley was getting at is this is another area that 20 was expressed to us in a lot of comments. There is 21 a concern that the guidance document will become de facto regulation. Even though it's a guidance 22 23 document at this point time, it is not binding. 24 Let me back up a little. The specific 25 recommendations in this document are not binding on

the government or growers. What we require is that the food be safe and wholesome and that's already a requirement by law. We have tried to be very careful and our technical experts across Federal and State agencies have helped up us look at all of the recommendations in the working draft and all of the comments that we received to make sure that this guidance document, when it is final, contains recommendations that are based on sound, generally accepted science.

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There is a real concern particularly on the part of growers that their customers will look at their recommendations in here and write those recommendations into a contract as a requirement for sale. Now, that makes us try our hardest to present this document in terms of the diversity of agricultural practices that are out there. We are sensitive to some things that may not be applicable across the board being written into a contract that then becomes a requirement, one example is the irrigation system.

Granted, if you can minimize the water to produce or to the edible portion of the crop contact you are minimizing the potential for exposure to pathogens, but we wouldn't want buyers to write into their contracts that all fruit and vegetables have to be grown with drip irrigation. For carrots, for example, I mean, that requirement makes no sense. For a lot of other type of produce such as citrus growing in trees you may have an irrigation system that's not drip irrigation, but you may still have little or no contact with the edible portion of the crop.

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So one of the other things is at this point in time microbial testing of agricultural water may have usefulness in some situations, but I don't think that we know enough to put a strong recommendation that every one across the board perform those kind of tests. There are a number of things going on that may help us get closer to being able to provide those kinds of recommendations, but we are not there yet.

MR. PYBAS: Don Pybas, County Extension Director. One of the issues that we are dealing with locally, I know this is not a local issue as far as the overall program, is one of allocation of water to agriculture urban and environmental uses with the Everglades restoration. At some point in time there will probably be more stringent guidelines and restrictions on water used for agriculture. The country currently puts to sea about three hundred million gallons of water a day through sewer treatment facilities and ocean outfalls. They, several years ago, had a visibility study looking at gray water reuse in the area, and at some point in time one of the alternative users of that would be agriculture. Has the agencies looked at the area of gray water use and the implications of that as it relates to these guidelines?

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MS. SMITH: We haven't specifically focused on that in the manure section of the document. We looked a little bit at use of biosolids, but as far as gray water or municipal waste water use on agricultural land, we haven't specifically looked into that in any great detail. On the other hand, I attended a recent meeting that USDA Agricultural Research Service held and one of the scientists at that meeting just made a comment in a sidebar conversation that she would have actually less concern about produce grown in an area that's using the gray water, because there has been so much research done on water the microbial criteria are in that particular situation, but it's not something that we've looked into specifically for

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this.

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2	MR. WARREN: You have to forgive me. Water is
3	critical. Without water we cannot grow anything.
4	The water with the growers is critical, too. They
5	are expanding, they are growing and they have to
6	take care of it. I have been involved with the
7	crops in Central America for twenty years. I
8	myself have brought in right now we are bringing
9	over four million packages a year, and in the 20
10	years let's say that I brought in 50 million
11	packages or more, never once has the ever been a
12	problem with our product, with any contamination or
13	any problem. A slight problem comes up somewhere
14	and they blow it all out of proportion. Can I
15	assure that this problem that you have in the
16	water, they are very conscious of it, our people,
17	and they are doing everything they can to make it
18	as good as it can, and that's what this is all
19	about. I can assure you that they are doing it.
20	MS. SMITH: Thank you. We are aware of a
21	number of programs that are taking really
22	significant steps toward doing everything that they
23	can, in fact, covering all bases. I'd like to move
24	on to processing water, so that we can get through
25	all these sections. At the end if you think of any

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additional questions, we can always go back a little bit.

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In the processing water section, which would be a kinds of operations performed post-harvest, we've again said that water quality should be compatible with its intended use. Some of the same things repeat itself in this section such as the degree of water-to-produce contact increases so does the need for high quality water. Treatments toward the end of processing, as you are getting closer to the consumer, particularly need a higher quality water than possibly treatments at the beginning of the process.

Now, when I say that I don't mean that water used early on for dump tanks or for fluming operations that it's okay if that water contains high levels of pathogens at that point because we are going to wash later, that's not what I mean. But in some operations there are practices such as recycling water. There may be a clean water final rinse of the product right before packaging, that water could be recycled in earlier operations. It would still have to be adequate for the intended use of those earlier operations, but when you are bringing in produce from the field it may have a lot of field soil attached. The moment that truckload of produce is dumped into that water you now have something that is certainly not potable water anymore.

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We said throughout this section of the guide the water has to be safe and sanitary for its intended use. We do not have a legal definition of safe and sanitary, but we are saying that in general water that meets the microbial standards for drinking water would be considered safe and sanitary. Although water quality needs may vary for different unit operations within a process, in no instance should contact with water leave that produce in worse shape than it started. Some of the good manufacturing practices that we recommend with respect to processing water do include periodic microbial testing.

You are now in a situation where you have more control over your water source, whether it's from a deep well or a municipal supply, and microbial testing does have value. You have the microbial criteria for drinking water as a guide. We recommend if you are using antimicrobials, which I'll get into in a minute, that you take steps such as monitoring the pH and the levels of

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antimicrobial chemicals that are present. As produce is sent through operations, plant material, field soil, other debris, may collect in your water systems and the water should be changed or overflow should be added as needed to maintain the water of adequate quality for those particular uses.

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Also, to maintain water quality you should routinely clean all of the surfaces that the water comes in contact with. Any equipment that you have in place to help ensure water quality such as filtration systems or chlorine injectors, backflow devices should be checked on a routine basis and maintained as necessary. The best type of program really is not worth much unless you can ensure that all aspects are functioning properly.

As I said a couple of minutes ago, the section on principles in the beginning of the guidance document stresses that prevention is preferred over corrective action once contamination occurs. However, produce is grown in pretty much a wild environment. Even if you have followed all the good agricultural practices that we are now aware of, it is not possible to completely eliminate the potential for any pathogenic contamination on produce, because the fresh produce, which is the

subject of this document, is not going to receive a 1 2 lethal treatment such as heat treatment. 3 Before it goes to the consumer there may be 4 advantages of adding additional controlled 5 processes to your post-harvest handling. One of 6 these processes involves the use of sanitizers or 7 antimicrobials in your processing water. This has 8 the advantage of reducing pathogens on the surface 9 of the produce and it may also reduce the potential of the buildup of pathogens in the processing 10 11 water. 12 In the guide we've said that if you are using 13 antimicrobials there are a number of things to 14 consider. First of all, you need the follow all 15 applicable FDA and EPA requirements. This is 16 probably a good point for me to pause and say that 17 throughout this quidance document we have cited 18

throughout this guidance document we have cited relevant United States Federal Regulations in those areas that growers and packers need to be aware of. This is also a document that we want to have global significance. We want to be able to impact on the safety of produce consumed by U.S. consumers regardless of whether it's grown domestically or internationally. One of the questions that myself and Joy Salsman, Dr. Salsman is one of the other

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drafters of this document, have asked and I'll share with you here, is how to best address two issues.

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First of all, there are regulations that people need to be aware of how best to help the users of this document and the documents that follow from it, get access to these regulations. In some instances the regulations may be short enough to attach as an appendage. In other situations, for example in a minute we'll talk about EPA Part 503 Rule, which is a book, it's just not practical to put that on there. What would be the most user friendly way to better help users of this guide get access to the appropriate regulations?

The other question is how best to maybe reword the sections of the document where we cite U.S. Regulations to let people know if they are in a foreign country that if they are not following the U.S. Regulations, if they are subject to their own national regulations, that there need to be an equivalent level of protection provided. So that's my question to all of you, and if you can help me on that, we'd appreciate it.

Getting back to the guide itself, when using

antimicrobials and processing water, it's important to follow manufacturers' directions both for the efficacy of those chemicals and also for the safety of everyone handling them, and people consuming the produce to which they've been applied. When antimicrobial chemicals are used on produce, that treatment, whether it's a wash or a dip, should be followed with clean water rinse.

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We talked a bit about maintaining the efficacy of watch treatments. It's important to recognize, and this goes back to a point made a little while ago from the audience, antimicrobial chemical may reduce but not necessarily eliminate pathogens on produce. The reduction tends to be a tenth to one hundredth fold reduction in the level of pathogens.

Furthermore, as organic material builds up in this wash water, and that organic material may be plant cells, plant juices, field soil, that ties up the antimicrobials and their efficiency decreases. Good manufacturing practices to maintain the efficiency of the wash include steps such as a prewash to remove as much field soil and debris as possible and other steps such as adding overflow water or changing water in combination with monitoring the antimicrobial chemical level and

T	adding additional chemicals as needed.
2	One of the other questions that I would ask
3	the audience. In this section of the guidance
4	document we have extensive footnotes on use levels
5	for different antimicrobial chemicals, use
6	conditions. We've mentioned a number of chemicals
7	that at this point in time may not well,
8	definitely are not widely used on produce. They
9	may have a history of use on other types of food,
10	some of them are used by the poultry industry.
11	Research is under way right now looking at the
12	efficiency of these chemicals in different handling
13	situations and the interaction between different
14	pathogens and different crop characteristics.
15	The development team was split 50/50. We took
16	our own vote and it went right down the middle as
17	to the usefulness of these footnotes and the
18	information in them. Let us know if that
19	information is helpful to you. If it's not helpful
20	in its present form and anyone has any suggestions
21	on how to better present it, please let us know.
22	And that's the summary of the processing water
23	section, and I'm open for questions again at this
24	point.
25	MS. BOREK: My name is Tina Borek and I'm a

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adding additional chemicals as needed.

local grower. I grow vegetables. And my question
is going to repair your question. I know that we
try our best management practices in agriculture
and we have people come check. The Department of
Agriculture was in my fields a week ago and checked
all my records, and I can see that this grower is
very concerned here. I'm pleased to have you here.
We see you came a long way. My question is, if you
are importing vegetables to here, would you find a
problem with our inspectors going and inspecting
your farm?

MR. WARREN: We've had people inspect our farms. I brought people from the lab, ABC Lab. It cost me \$1,000 a day to come inspect my farm, and I know, no problem, you're invited to come, too.

MS. BOREK: So that answers your questions on whether the foreign importers would mind if you went over there and use our regulations to check them, and they wouldn't.

MR. WARREN: I think what you say is most important because, people do not understand that they hear these stories, they are not true. You have an open door. You are welcome to come in there, but all I want to say in twenty years with millions of boxes of fruits there's never been a

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problem. This thing is exaggerated all out of proportion. And everybody is doing their best to solve this problem which you are all bringing out, that's what I want bring out. And in no way should you condemn the industry that's bringing in products when you don't have for all winter months. This propaganda is wrong about Guatemala.

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I have a friend that will not buy my melons because they come from Guatemala because of some story, how ridiculous can it be? How would you feel? It's wrong.

MS. BOREK: It's a global market and it's all we are looking for, a fairness globally. Everybody needs the same treatment.

MR. WARREN: I ship to England and they are really fussy there, more than anybody, and it's clear. But I'm just saying that this is out of proportion on what people are bringing in to our cities, totally out of proportion. The incident is microscopical and they make a mountain out of it, that's what bothers me.

MS. SMITH: I wanted to make just a little point. Lloyd said something this morning that I thought was very valuable. This is a public health issue, it's not a trade issue, and I don't -- I

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just want people to be reassured from that standpoint. Your invitation to come visit is a good reassurance.

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This produce safety initiative and guidance document is just part of the larger Food Safety Initiative. We are not singling out produce, we are just looking at one area that has recently been brought to our attention, the incidents of foodborne illness linked to produce is very small compared to other foods and the health benefits of increased consumption of fruit and vegetables far outweigh the risk, and so we don't in any way want to discourage the consumption of fresh fruit and vegetables. We just want to do what we can in this exercise to minimize those potential hazards that do exist.

MS. MEJIDES: My name is Ivonne Mejides and I'm an organic farmer. I've got to see the national senator hearing on Saturday on this food safety. On various occasions beginning with Senator John Glenn, he said that we have no winter growing area in the United States. Further down on the hearing we were said that we have a very short growing season in the United States and toward the end of the meeting they said most Americans will

buy American, but we cannot grow it all and California cannot do it all. What about us here in this area that are able to grow all this, whether it be organically or commercially? Why wasn't a representative of the State of Florida of agriculture there trying to defend the fact that what samples they had, everything on that table could have been grown here locally. The only senator there was the senator from Hawaii.

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MS. SMITH: I can't address that meeting, I wasn't there and I didn't see the guest list. We did have comments this morning that very clearly showed a significant amount of the domestic produce that's consumed in the winter months comes from this area even and --

MS. MEJIDES: I do have the list, and I apologize I was at the meeting of soil and water conservation, but it was very upsetting to me to see people in Washington not even aware of the fact that we are here and we do supply the nation with winter growing vegetables.

MS. SMITH: We can take your comments back as a part of this public record. You might even want to address that committee directly.

MS. MEJIDES: Thank you so much, appreciate it

1 for your time. 2 MS. NIELLA-BROWN: Would you like to have a break? 3 4 MS. SMITH: Would people like to take a break before we move on to manure or should we keep on 5 6 rolling here? 7 One other comment, we do not use MR. WARREN: 8 any manure. 9 MS. SMTTH: I think we have a vote to 10 continue, at least through the manure section, then 11 I think we may take a short break. 12 We just had a comment from the audience 13 stating very proudly that he doesn't use manure. 14 I'm not here to discourage the use of manure. 15 Manure and biosolids can both be very beneficial 16 fertilizers and soil amendments, but they do 17 represent a significant potential source of hazard, 18 some of the human pathogens are listed on this 19 slide. So when manure is used in an agricultural 20 situation certain good agricultural practices do need to be followed to minimize the hazard. 21 22 Now, we also mentioned the use of biosolids in 23 the guide very briefly. EPA has a number of 24 regulations dealing with the use of biosolids. 25 These regulations include the requirement that

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pathogens either be eliminated or significantly reduced in conjunction with certain limitations on use. These limitations include restrictions such as a fairly significant amount of time between applications to land and the harvest of edible crops.

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Now, as I had said, the use of manure and the production of fresh produce must be closely managed to limit the potential for pathogen contamination. 10 Good agricultural practices for handling manure 11 include treatments to reduce pathogen levels in the manure and maximize the time between manure application to crop fields and harvest of crops. Growers also need to be alert of the presence of fecal matter that may be unwittingly introduced into the produce growing and handling environment. Potential sources of contamination include things such as using untreated or improperly treated manure, nearby manure storage or treatment areas, livestock or poultry operations and also high concentrations of wildlife.

Treatments to reduce pathogens in manure can be divided into two general categories, the first category is passive. Passive treatments rely primarily on the passage of time and environmental factors such as fluctuating temperature and
moisture condition, ultraviolet irradiation.
Active treatments include pasteurization, heat
drying, anaerobic digestion, alkali stabilization
and aerobic digestion or a combination of the
above. Composting is a fairly common practice.
It's a controlled and monitored practice as opposed
to passive treatments.

9 The high temperature generated during 10 composting can kill most pathogens in a number of 11 days, therefore the risk of pathogenic 12 contamination from manure that has gone through a 13 composting treatment is reduced compared to untreated manure. However, some pathogens have 14 15 higher thresholds, thermal thresholds than others 16 and there are enough regional differences and differences in the materials that we don't at this 17 18 point in time have specific time temperature 19 recommendations for a composting process to 20 effectively eliminate pathogens. We also have a 21 number of questions about to what extent can 22 pathogens that survive treatments such as 23 composting regrow if the composted manure is stored 24 before use.

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Some of the GAPs relative to handling and

application of manure include things such as storing manure or having treatment sites located to fresh produce, located close to fresh produce fields may increase your risk. Grower should follow the GAPs such as the secure manure storage and treatment areas establishing runoff controls to minimize contamination. They may want to consider doing things such as covering the compost piles. Some of our state folks in Michigan provided recommendations for material that could effectively cover manure storage or treatment areas. In some places manure may be stored under a roof just to minimize the amount of leachate from that stored manure due to rainfall and runoff.

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15 Use of untreated or raw manure carries a 16 greater risk of contamination compared to the use 17 of manure that's been treated to reduce pathogens. 18 In our guidance document we are saying that the 19 application of raw manure to produce fields during 20 the growing season is not recommended. Many people who also tell you that applying raw manure to a 21 22 growing crop may burn the crops, and so no sane 23 person would do it anyway. Growers again may 24 reduce the risk of pathogenic contamination by 25 maximizing the amount of time between application

of manure and harvest of crops. This is one of the areas where we received a significant number of comments on the working draft.

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In the working draft document we cite the National Organic Standard Board recommendations for a minimum of 60 days between manure application and harvest, and we also cited 120 days, which was provided to us, information provided to us in antidotic stories. Comments came in and the comments are correct that we do not know how long pathogens can survive in the field and we don't know how long that would be under different conditions.

We have kept in the proposed guide the reference to the National Organic Standard Board's 60 day minimum. We have deleted our specific 120 day reference. We have cited some research that may indicate that at least under some situations, some pathogens can survive significantly longer but we have stated that at this point in time no one knows how long pathogens can survive. Because composting and treatment such as composting may reduce, but not eliminate pathogens, we also recommend in the guide that growers consider some of the practices that we've recommended for use of raw manure, even when they are using composted manure. Practices such as maximizing the time between application and harvest.

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There's a lot we don't know at this point about pathogens in manure. Research is largely just starting in this area. Much of the research that is the basis for current, they call them best, management practices for manure handling based on other factors such as soil, fertility and crop needs. So it's just now that we are starting to look at the food safety issues. As additional information becomes available we hope to further refine those recommendations. That's the end of the manure section. I'm open for comments.

MS. PEAL: Sorry. Science question again, and I know you've indicated that this is new avocation for you in terms of manure, and its application and all, but on one of your supposition, based on the fact that possibly using let's say for example E-Coli latent manure, it's there, you know it's there. Can that get into the body of the product as opposed to getting it on the outside, which you know can happen, which could be washed out or can be raised into it. I mean, can it be present, can that pathogen through the growing process be present and never be removed by the washing process by virtue of the fact that it was grown into it and is there at all times?

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MS. SMITH: I think by far the largest concern is pathogens that are present on the surface of produce when the produce is harvested. I don't personally know of any instances of pathogens uptaking the produce. I'm not saying it's not impossible, but the largest concern is what's on the surface.

There are some situations such as cutting where it may be introduced. The guidance document does cover products like fresh cut, but it also states that additional considerations may be necessary because of the added processing steps that follow, and we didn't address them specifically at this point in time. Now, I think there was another part to your question that I'm missing or slipped my mind.

MR. GOMEZ: Michelle, I think you may deal with some of that as well when you -- with wash waters and so on, because there's certain produce that can internalize.

MS. SMITH: We didn't get into that when -- I skipped over that in processing water, but another phenomenon that has been noted by researchers is if there is E-Coli in processing or if there is pathogen in general in processing water. With a product like tomato that has an internal air space, if that product is exposed to colder water it can adjust the pressure differential, sucks the water into the produce and if pathogens are present sucks that is in also.

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Now, in the working draft we made the recommendation that water temperature be ten degrees warmer than produce and that it be chlorinated. Many of the comments that we got said that that was not a practical recommendation. The primary consideration for most crops is removing field heat. It's not a hazard for most crops.

At this point in time the only crop that we have solid research that does that is tomato. On our recent site visits we found that tomato packers were carefully monitoring water temperature and making sure that they were ten degrees warmer. Now, the tomato packers they have been doing that for some time because they've also noticed that water uptake phenomenon. And if you get water sucked into your tomatoes and they spoil, they are not marketable product. MR. GOMEZ: Let me interrupt again. There's also solid evidence in peppers and apples pathogens can be internalized, and we've all seen-- I think we've all seen mold growing inside of peppers and so on all those internalization, but basically the peppers and apples are all things --

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MS. PEAL: Thank you, sir. Once again, I'm just trying to portray that so many cases we've heard that the consumer has the utmost responsibility of making sure these are taken care of, but these are things that I could not as a consumer control. I would not know that they were in there and there's nothing I can do to make it safe once it gets to me. Am I correct in that assumption, just on the examples that we just talked about in uptake -- there's nothing I can do to make it safe for myself if this, in fact, transpired?

MS. SMITH: I hate to ever tell anyone there's nothing they can do. I think that there are a lot other things consumers can do in general just as far as washing produce, safe handling. We are all partners in this throughout the chain, so there are earlier responsibilities before produce gets to the consumer. Specifically what you could do with that

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1	tomato, I would have to talk with our
2	microbiologists and see.
3	MS. PEAL: But given there are situations that
4	I as a consumer would not be able to control unless
5	I was also a scientist in my kitchen. You are
6	agreeing with me on that one prong?
7	MS. SMITH: Well, I'm thinking that as a
8	consumer you look at your relative risks, you look
9	at your health benefits. We want people to have
10	confidence in the food supply. The situation that
11	you are describing of
12	MS. PEAL: It's possible.
13	MS. SMITH: It's possible, it is very
14	unlikely.
15	MR. WARREN: I just want to make one comment.
16	Maybe about two years ago they found some
17	cantaloupes that had a problem in it and where do
18	you think it came from? Some damn fool put it in a
19	truck that was hauling animals with waste and put
20	the cantaloupes in the waste, one incident. Since
21	then they've never found it at all.
22	Now, everything you know, nature has it's
23	way. You grow a pepper, it's perishable. It
24	rains, it does this and that, so far, so you can't
25	control the air you breath is contaminated,

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1 should we stop breathing. So let's be sensible 2 about this thing. Our product is safe and it's good and this propaganda should not be against us. 3 4 MS. SMITH: I think on that note I'll give us 5 all a seven minute break. We can come back here at 3:30. 6 7 (Thereupon a recess was taken in the 8 proceedings, after which the proceedings 9 continued as follows:) 10 MS. SMITH: I think we are about ready to start the next section on sanitation and hygiene. 11 12 One of the things about this quidance document is, 13 its first purpose is to increase the level of 14 awareness of areas that may be a potential source 15 of contamination, and then it goes from there to 16 make recommendations for specific practices that 17 might be followed to reduce or minimize the hazards. 18 19 We need to recognize that there's a diverse 20 agricultural work force in the U.S. and globally

agricultural work force in the U.S. and globally made up of individuals from different backgrounds and cultures. It cannot be assumed that this work force knows about or follows good hygienic practices while working with fresh produce. The guide recommends that all operators establish good

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hygienic practices that should be followed by everyone who works with or handles fresh produce. Everyone at all steps of the food chain who handles food is a food handler. Perhaps it is the first step in establishing good hygienic practices for growers and packers to be aware of existing State and Federal regulations regarding standards for worker hygiene and sanitation in the agricultural and produce packing operations.

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For example, the Occupational Safety and Health Act has set a standard for protecting worker's health in the field and in packing facilities. It's important to remember that infected employees increases the risk of transmitting foodborne illness. Therefore, all personnel should comply with the established hygienic practices.

What can growers and packers do? We recommend that they establish a training program to teach good hygienic practices. Each program should be geared toward the level of understanding of the worker of formalized program along with periodic evaluation and follow-up training sessions has proven to be effective in other segments of the food industry.

Operators with the person in charge of the employees should also become familiar with typical signs and symptoms of infectious disease. Workers with diarrheal disease and other signs of infectious disease should not work with pressure produce or produce handling equipment. Lesions containing pus that are located on parts of the body that might have contact with fresh produce can contaminate it. Operators should provide protection for those workers such as gloves or waterproof bandages. If a lesion cannot be adequately covered so it will not have contact with produce, the worker should not be handling fresh produce. The guide also mentioned the use of gloves. In comments to our working draft this was another area that generated an awful lot of comments. In the working draft we had said that all workers and visitors to farms and packing houses including inspectors should wear gloves. Comments that we received in return noted that the gloves themselves can be a source of contamination. They also noted that some crops have their own particular needs as far as glove use goes. Some crops, for example, need to be handled using cloth gloves. What we have done now in the proposed guide is take a step

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MIRIAM G. FISHER REPORTING SERVICES, INC. 7730 S.W. 72nd Court, Miami, Florida (305)663-9833 back from the recommendation that gloves be worn by all people, we're stating now that gloves may be a good hygienic practice in some situations in combination with appropriate hand washing practices, that all people that handle produce should follow appropriate sanitary and hygienic practices making it more of a performance based recommendation, and that in no instance should gloves serve as a vehicle for contamination.

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Part of the training program as I had mentioned a minute ago would include just teaching the principles of good hygiene. Don't assume that everyone knows the correct way to wash their hands. With respect to toilet facilities, the guide recommends that workers be encouraged to use available facilities. This is particularly important that the facilities be accessible and in good condition so that people will be likely to use them as opposed to undesirable practices like relieving themselves in the field. Ensure that employees have an opportunity to use the facilities whenever they are needed, not just on scheduled break times.

Many of the requirements for facilities are set in OSHA regulations, which are cited in this

guidance document. In this area and throughout the guidance document we have stated that the recommendations in the guide are not meant to replace existing State or Federal regulations.

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Toilet facilities and handwashing stations should be accessible, properly located, well supplied with toilet paper, a wash basin, water, soap, sanitary hand drying devices and a waste container. All facilities should be kept clean and sanitary and container used to store water for hand washing should be clean and sanitized on a routine basis and refilled with potable water.

When handling sewage disposal from sanitary facilities, operators should follow all applicable EPA regulations. Tank trucks should have direct access to toilet for servicing and there should be a plan in place for containment of any waste that may leak or spill from, for example, portable toilet facilities to ensure that this material does not contaminate growing produce.

A number of comments were concerned about recommendations in the guide to follow sanitary practices in the field. Some of these comments brought up the point that the field is not a sterile environment and they expressed concerns that the quide was trying to make a field into kind of a sterile operating theatre situation, and that's certainly not what we expect to do with the natural field environment. However, there are a number of practice that growers can follow. These practices include things such as cleaning, harvest storage facility prior to use, repairing or discarding damaged cartons, cleaning muddy containers before use to help prevent cross-contamination from one load of produce to another or from materials that may have come in contact with containers when they were stored between harvest seasons. Other recommendations include removing as much mud and dirt from produce as practicable in the field and ensuring that produce that is packaged in the field is not exposed to any sources of contamination in that process.

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Equipment should be use appropriately. Now, equipment here is a very broad category. It includes not only trucks and other vehicles, but the bins and buckets used for the harvesting and transport operation, table packaging material etcetera. Any equipment used to haul or carry garbage, manure or Paul's goats, should be

MIRIAM G. FISHER REPORTING SERVICES, INC. 7730 S.W. 72nd Court, Miami, Florida (305)663-9833 carefully cleaned and disinfected before it's used to transport or carry fresh produce. The guide recommends that operators assign someone to be in charge of equipment and be responsible for ensuring it's maintained in an appropriate condition and kept as clean as possible.

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For all packing facilities, packinghouses and the grounds around them, a general recommendation is that they be maintained in good condition to reduce the potential for microbial contamination of As I had mentioned before some of fresh produce. the controls that you can use in the packing facility is to remove as much dirt and mud as possible from the produce while it's still out in the field. Depending on the situation you may have varying abilities to do them. In our recent site visits we saw a carrot operation where it seemed like the trucks were unloading at least as much field soil as they were carrots. Now, this operation was making every effort in their other practices to follow good manufacturing, good agricultural practices and I don't want to say that it was a bad operation, but the fact that they were bringing in so much field soil placed a tremendous burden on their subsequent cleaning steps, and if

there was something that they could have done such as even adjusting their harvest equipment to leave more of that soil in the field and bring less of it into the packinghouse environment that would be desirable. On top of that the conditions were very dry, the field soil that they were bringing in was blowing throughout the packinghouse even as high as the second story catwalks, so it was something that in that situation it would be worth them looking at further.

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All equipment in the packing facility that comes in contact with the produce should be as clean as possible, kept in good working order. All packing areas should be cleaned at the end of each day of use or more frequently as needed.

If produce is cooled, the cooling system should be maintained in proper working order and kept clean. Some of the antidotal stories that we picked up from the State public health officials that helped us with the comment review dealt with is hydrocoolants for water was changed once a year. Now, when situations like that come to your attention that is not the industry norm, but it's certainly something that if the level of awareness for that particular operation can be raised and that practice changed, we're taking steps in the direction that we want to go in. It's also important in the facility to clean all product storage areas on a regular basis, removing dirt, debris and product waste.

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All packing facilities should establish a pest control system. They should maintain the grounds in good condition, including appropriate waste storage areas and frequent waste removal. Monitor and maintain facilities regularly to ensure that the pest control program is effective. Block access of pests into enclosed facilities. Some packinghouse operations may even be a rolling conveyor belt going down the field or they may be a pavilion style structure to the extent possible, and some of those it's very difficult to control what may fly by or run by as you are going down the field. But in an enclosed facility it's very important to exclude pests from that facility. Use of a pest control log may also be helpful in being able to assess your own particular operation and how it's going, what's been done, what may need to be done.

A new section in the proposed guide deals with customer pick operations. This is in response to

some of the comments that we got on the working draft. We are urging operators who permit customers to come into their fields and pick produce, to encourage those customers or take advantage of this opportunity to encourage the customers to use good handling practices for fresh Customers should follow a establish produce. hygienic practices and all customers who pick produce should be provided with properly equipped hand washing stations in the field and there should be clean, well supplied and convenient restrooms for their use. Finally, we encourage operators to educate consumers about washing fresh produce that is to be eaten raw.

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In the transportation area it's important to remember that produce may become contaminated during loading, unloading, storage and transport operations. Workers involved in loading and unloading produce should follow good hygienic practices, just as anyone else involved in the handling of produce. We recommend that operators assign someone specifically to be responsible for ensuring trucks and transport cartons are clean and sanitary before produce is loaded. We recommend that they find out what previous loads were carried in that truck before loading produce. Some of the packing operations and growing operations that we've seen rather than trying to inquire as to the previous load of the produce may just choose to clean those trucks and do that regardless of what was carried before.

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During transport, as at every other stage along the way, maintaining the appropriate temperature to maintain the quality of that produce also helps minimize risks to produce. That is sound and, in fact, provides better barriers against microbial contamination compared to produce that is damaged. Are there any questions on worker sanitation, hygiene, facility sanitation and hygiene?

MR. MATTHEWS: Hello again, I'm Charley Matthews from Florida Fruit and Vegetable. A question about the field sanitation and the packing house sanitation. If you are currently following OSHA field sanitation regs, do you feel like that is adequate from a worker's sanitation perspective?

MS. SMITH: Okay. I've got to say one thing right up front, two of us worked on this guidance document, Dr. Salsman was more the expert on this

section. Wayne Derstine, who's still here, has volunteered to be my backup on technical questions in this area because I'm not intimately knowledgeable of OSHA regs. I didn't know if strict adherence to those regs would ensure that everything that's being done to -- that's possible has been done. I can't tell you.

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One thing I will say from my own observations just assuming that the OSHA regs say that a certain number of facilities has to be within a certain number of feet or a certain number of employees, and that's my understanding. Things should still be easily accessible, common sense on the part of the grower. If the requirement is 50 feet but there's a big ditch in the way, it's going to take somebody an extra ten minutes to climb through that ditch, they may not bother to come all the way out to the other side.

MR. MATTHEWS: From my perspective it would be advantageous if the regulations and the guidance were transparent so that we did one thing versus having to do one set of deals for FDA and another set of deals for OSHA. I mean, it makes no sense, where you can, to make the two regulations transparent of each other.

1	MS. SMITH: If there's any place that you are
2	aware of that we get inconsistent, let us know.
3	MR. MATTHEWS: I'm asking you. I think it's
4	consistent, that's my question.
5	MS. SMITH: Dr. Derstine.
6	MR. DERSTINE: Dr. Derstine, Florida
7	Department of Agriculture. Charley, if I
8	understand your question, do you feel that we are
9	consistent enough between the sanitation facilities
10	that we have for packinghouses, which would be
11	regulated by FDA, versus those regulations of OSHA,
12	which regulates the field employees, as I recall
13	them, is that
14	MR. MATTHEWS: There are two different
15	standards, one is field sanitation standard and the
16	other one is facility or packinghouse standard.
17	MR. DERSTINE: Yes.
18	MR. MATTHEWS: I guess in specific to the
19	field, my question was, if you are following,
20	you're abiding by those regulations, to me it would
21	seem that those were adequately adequate for
22	workers regarding the things that FDA is talking
23	about, you know, washing hands, providing soap and
24	towels and those types of things.
25	MR. DERSTINE: They certainly appear to me
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that they are, talking about being transparent, 1 2 The OSHA is not asking for that they are. 3 anything. You have to understand, because they are 4 mobile that you move them with the workers, but 5 it's the same requirement if they washed their hands after using the toilet facility and that is 6 7 same thing that FDA asks for in a fixed facility. And I don't see that there's any different 8 9 requirements other than sometimes the distance you 10 may have to go to, like Michele said, if there's a 11 big 20 foot ditch there and you have to walk all 12 the way around you can always just stop and do it 13 there. That's where maybe the difference that you 14 are trying to get at. 15 MR. MATTHEWS: Okay, OSHA requires that they 16 be accessible, that's not appropriate for hazard --17 MR. DERSTINE: FDA we require in fixed facilities they be accessible, so we require 18 19 certain things about hand washing, soap, towel 20 etcetera, I think to me they are the same. 21 MS. SMITH: I'm going to wrap up now with the discussion of traceback. This was covered in great 22 detail by Doug Tolen this morning and I think he 23 24 did a wonderful job. I'll just introduce a little 25 bit of what the guidance documents specifically

does. In our working draft we got a number of
comments from people that were concerned about the
amount of paper work or the cost of instituting a
lot numbering system or some other system to
facilitate traceback, and the point that we want to
make in this guidance document is that although
traceback systems may not be able to prevent that
initial outbreak, they certainly would be a good
complement to an effective food safety program.
And there are a number of public health benefits
and economic benefits to the industry of doing
everything that they can to pursue effective
traceback systems, and we get into these a little
bit.

The point that I would like to make here is that once an epidimiological study has implicated or identified a food item that's suspected to be the source of the foodborne outbreak, there are two ways to trace it back to its source. One of the ways is using lot numbers or other identification if they are available. The other way involves looking at the records at the point of services or point of sale, interviewing a lot of employees there and working your way backwards through the chain talking to people at each step along the way, looking at record. This takes a lot more time, more resources and relying on people's memories may be a less than effective system.

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We heard a little bit this morning about challenges facing the fresh produce industry with respect to effective traceback. One of these challenges is or two challenges are the practices of reusing containers so that the identification on a container may have nothing to do with the product that's in it at that moment. And the practice of commingling at repacking houses or at other distribution points.

These are big challenges, we recognize. They are certainly hurdles to be overcome, but the benefits of an effective traceback system are certainly incentive to look at ways to overcome those difficulties. Some of these benefits are that an effective traceback system may lead to specific region packinghouse or fields rather than leaving the entire commodity group open to suspicion. It may limit the extent of the outbreak, it may limit the population at risk to be able to quickly find out the source of a product that's implicated. It may also help reduce consumer anxiety about consumption of a particular

commodity if the information could be made available very quickly that the source was identified and the cause was an isolated occurrence.

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Improved traceback may also be useful from a public health and grower perspective in that the information gained may help us refine the types of good agricultural practices and good manufacturing practices that we are recommending based on a clearer idea of where the potential hazards actually are. It was mentioned this morning and I've seen myself on site visits that some industry segments are currently using lot numbering systems that may identify produce all the way back to even the individual harvester. That was very encouraging for me to see, it exceeded my expectations. Any information that we can get leading back, at least, to the farm level helps narrow the search for a cause.

And finally once good agricultural practices or good manufacturing practices are adopted by growers or packers, there needs to be some kind of system in place to ensure that the process is working correctly. Regular monitoring of the operation to ensure all practices are followed is

one of your recommendations. I had mentioned
earlier that for some practices it may be very
worthwhile to have a certain individual who is
specifically assigned the responsibility for making
sure that employees receive appropriate training or
for making sure that trucks are clean and sanitary
before produce is loaded. Without accountability
the best attempt to minimize the risk of
contaminating fresh produce may be subject to
failure. And that's the wrap up of my summary of
the guide. If there are any questions on this last
section or any of the other sections, I'm open.

MR. WARREN: I just want to comment on the things we are doing on our farm. First place the sanitation situation, it can be improved. Basically the toilet facilities on the farms in general out there are very rudimentary on people, and we are planning to put septic draining systems for the thing and we are looking into having mobile toilets in the field. It's a big investment. The truck alone to clean up the waste is \$10,000 in the mobile things, so it isn't such a simple situation.

Everyday our packinghouse is washed down, sanitized completely, all the equipment. We have a doctor on call to examine our people all the time and he comes several times a week, if necessary on a daily basis. We feed them lunch everyday. It costs us one quetzal. One quetzal is about 15 cents. We work out the entire situation. So all our pallets -- we ship 2,000 pallets a week, every one of them electronically scanned, which tell which field, when it was picked and so forth, all background. All these things are being covered.

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Now, the other people, it's going to be -it's very, very difficult because the little farmer can't do that. All my of people needed technical training so they could perform all these situations, so it's not an easy situation, but they are attempting to do that.

Just once again, just repeating it, the product coming in from all these growers, we are all very concerned and they are going to do their best to correct it and the people should feel assured about it, because during winter months we can't grow the produce here, it's cold. The weather controls it. For six months we bring in product so the people can have healthy products and eat it, and we want to work with you and work this thing out together. So this is the message I've been trying to say. Thank you.

1 MS. PEAL: There's a lot of soft language in 2 the document, this concerns me as a consumer. I'm 3 not a bit concerned about the people surrounding me 4 today. As a matter of fact, I'm enriched by people 5 that are here today. You are here because you care 6 and you are here because you are going to do the best for the consumers, not just the United States 7 but of the world. We are not breaking up the 8 9 memorial as I spoke earlier and saying, gee, 10 somebody is going to get sick from my product. You 11 are here today to keep us safe, but this is a very 12 small gathering and that's why I'm concerned that 13 we need tough language to make sure that those people who aren't with us in the game will make 14 15 sure that the consumers will be safe. I want 16 everybody to be on my watch and I want everyone to 17 be on the FDA's watch. I want the USDA to be on 18 watch. I want every government agency, every 19 producer, every harvester, to be on watch to make 20 sure that we are all safe. We wouldn't have been 21 here today had there not been serious incidents of 22 illness and death, that's why we've had this 23 qathering. I've heard wonderful things, but I want 24 to make sure that we don't just keep it in a soft 25 sense. Let's put some real hard lining action into

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it and then maybe the next time we'll meet it will all be at a luncheon not in a room saying what can we do to make it better. We'll have made it better and consumers in not just the United States, but the entire world will be safer because of your efforts. Thank you.

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MS. SMITH: I'd like to say one thing in closing. We really are looking for your comments. I appreciate all the wonderful comments that have been provided here today. As has been mentioned before, the comment period continues until June 29th for yourself and your colleagues. The final guide that we publish in October can only be as good as the input that you provide.

A lot of comments from the working draft helped us bring this to where we are now. We want it to be as good as it can be, and we are looking for your help to do that.

MR. WARREN: Just one other thing, it's an education process, it isn't a government process. You have to reach the people that are doing it and make them understand why it's important, why it's good for them, that's why the challenge.

MS. PEAL: And that's what I'm worried about. I've heard the term voluntary so much today, sir,

1	and I am a product of the voluntary process that
2	didn't work for my family.
3	MR. WARREN: You still have to be
4	understanding and knowing there's just so much that
5	we can do and do our best and not condemn the
6	situation for some isolated incident.
7	MS. PEAL: Sir, when it's your own family
8	member it's not isolated, it is entirely global.
9	And I know a lot of instances where there are
10	family members, so I'm hopefully here representing
11	that group of people who have personally suffered
12	the tragedy of maybe not all good practice being
13	put out and around in this particular arena.
14	MR. WARREN: But regardless everyone can only
15	do their best. That's what we are trying to do.
16	MS. NIELLA-BROWN: Any other formal statements
17	from the audience. Sir?
18	MR. MATTHEWS: Good afternoon. My name is
19	Charles Matthews, and I am the Assistant Director
20	with the Florida Fruit and Vegetable Association,
21	beyond that locality it's called FFVA. FFVA is a
22	55 year old voluntary grower association which
23	represents the majority of vegetable, fruit and
24	sugar cane production in the state. Florida has a
25	highly diverse produce industry that has farm gate

value totaling approximately \$3 billion. Florida leads the nation in the production of 14 different individual fruits and vegetables including citrus, tomatoes, sweet corn, snap beans, and limes, to name a few.

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For several years, FFVA has been actively involved in the promotion of increased consumption of fruits and vegetables, as well as science-based efforts to educate growers to further enhance the wholesomeness of the produce grown and consumed in the United States. Americans now consume about one billion servings of fruit and vegetables each day. These one billion daily serving provide a myriad of health benefits. American farmers produce the most wholesome agricultural products in the world. Unfortunately, the incidents of foodborne illnesses attributed to fresh produce have increased over the past 10 years. I strongly feel that this increased incidence is not a reflection upon the American producer, but rather a combination of several factors including an increased scrutiny by various health organizations, the relaxation of consumer safeguards such as the known continuous cold chain, proper preparation, etcetera, also the cross-contamination with other food items and the

amount of fresh fruit and vegetable imported to the
United States. For example, Federal statistics
tell us the amount of imported fruits and
vegetables consumed in the United States has
doubled in the past 10 years. These increased
incidences will likely continue as governmental
agencies continue to focus on fresh produce. As
this occurs, it is extremely important that
regulatory agencies not discredit our American
producers' safest produce in the world, but rather,
focus on true science-based factors that contribute
to this perceived increased incidence.

FFVA has been actively involved in the food safety issue for over half a decade now. We have been active at the national level and even at the low local level in a variety of endeavors. In general, our industry, our produce industry has been extremely proactive on this issue. Throughout these efforts we sincerely believe that most of our industry has moved to where they need to be in regard to food safety.

We appreciate that the agency's proposed guide has been developed as a guidance, as opposed to regulation. This is extremely important given the diversity and scope of our industry. Most of our

farming practices and post-harvest practices are the result of literally generations of farming families' unique improvements toward our current state of the art supremacy and wholesome and inexpensive produce production. There are literally hundreds and probably thousands of examples of this diversity ranging from the number of crops that are produced, the number of soil types that we grow those crops in, different irrigation practices, to different harvesting procedures, packing facilities and post-harvest practices. In order to encompass this diversity, FDA and USDA activities must remain quidance in nature.

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FFVA is currently digesting the FDA and USDA guide and we will soon be submitting formal comments to the agencies. In general, I would like to share with you some of our observations to date. First, we sincerely appreciate the agency's sensitivity to our needs and concerns. The proposed guide was well written and for the most part easily understandable. The guide also covers the three main areas we feel are most important to food safety, and that includes water, animals, including humans, and equipment. While we applaud the efforts of FDA and USDA at the field and packing level, there does not appear to be the same sort of attention that other levels within the produce chain, which are linked closer to human consumption. The old saying about a chain is only as strong as its weakest link is that applicable to our produce system where the links also include transportation, as you mention, distribution, retail and consumer preparation. And unless efforts in these area are concurrently moved forward, the strong link that we create at the production level may break down as we move toward the consumption link.

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The USDA/FDA guide should remain focused on strong science excluding the influence of political science. Our understanding of and the science of potential microbiological pathogens associated with fresh produce is only in its infancy, yet, there are political pressures which are driving the agencies toward rapid implementation. In our haste to do something we must be sure that that something has a strong science and research basis. Guidance based on mere observations, assumptions, and/or speculations may, in fact, worsen the situation. For example, we know that chlorination of tomato wash water significantly reduces the potential for
microbial growth. Yet, transferring this practice
to peppers may increase the potential for microbial
growth. Other examples would be agency
observations of production practices such as the
use of surface irrigation water in California or
pesticide carrier water in Guatemala. The jump
from suspected practices to hazards must have a
scientific basis. Dramatic increases in research
are needed to do two things: A, determine where
potential hazards may occur, and B, determine which
practices may mitigate these potential hazards.

The other general area we would like to address today is the distinction between fresh and processing practices. There are current State and Federal regulations which govern processing practices for food establishments which prepare foods for consumers. There need to be a crystal clear distinction between these types of establishments and produce grown and packaged for bulk shipment at the grower level. Because our crops are produced in the natural environment, they cannot be expected to be 100 percent free of microbiological agents. Our crops coexist with the natural environment. There are numerous State and Federal regulations which govern how we interface with the environment, and that environment includes birds, bees, bears and alligators to name a few. Crops produced in the natural environment should not be subject to the same regulation intended for food preparations establishments.

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In conclusion we appreciate the opportunity to provide input to the guide and FFVA stands ready to work with FDA and USDA state agencies on this critical effort. Thank you.

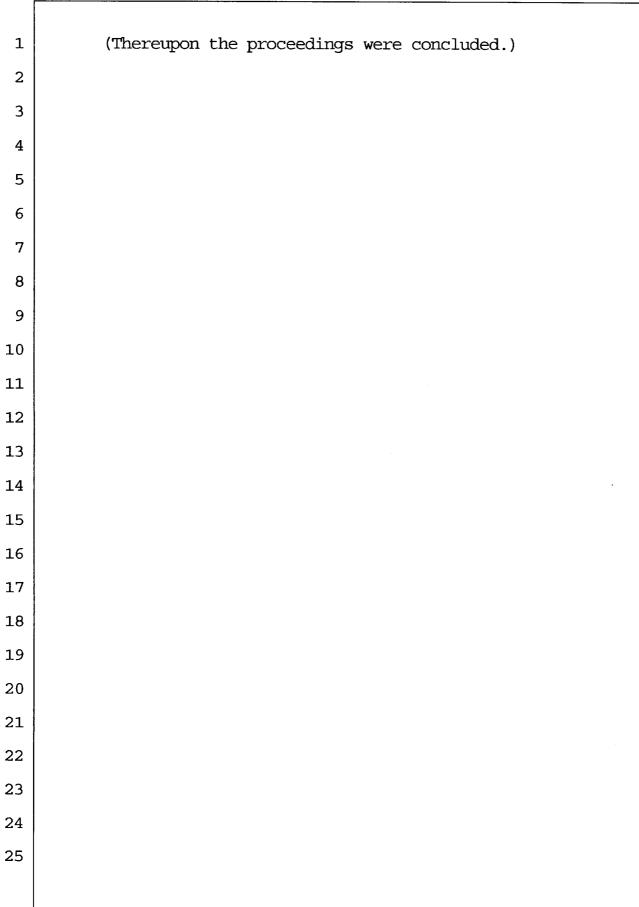
MS. NIELLA-BROWN: Thank you for you comments. Any other formal statements from the audience?

MS. GREEN: My name is Katherine Green and I'm with the Dade County Farm Bureau the Farm Bureau represents local growers here in this area and Homestead area. I find that it is of utmost importance that if our growers are going to be given these guidelines to follow that other countries that we allow to import fresh produce into the United States also be required to follow the same guidelines on growing conditions that are established here in the United States.

Also for your traceback segment that you talked about just a few moments ago, I think that

1	it is very important that we establish a country of
2	origin labelling law, and I just would like to put
3	that on public record that here in Florida we do
4	have country of origin labelling, but we are the
5	only state here in the United States that does have
6	that requirement. And for consumers to not know
7	where their fresh produce is coming from and to not
8	know if those countries are being asked to comply
9	with the same guidelines or the same restrictions
10	that we are being asked to comply with here in the
11	United States, I think it's an injustice to the
12	consumer and I would like that to be on public
13	record, thank you.
13 14	MS. SMITH: Thank you.
14	MS. SMITH: Thank you.
14 15	MS. SMITH: Thank you. MR. WARREN: Can I answer that very briefly?
14 15 16	MS. SMITH: Thank you. MR. WARREN: Can I answer that very briefly? MS. NIELLA-BROWN: Very briefly, please.
14 15 16 17	MS. SMITH: Thank you. MR. WARREN: Can I answer that very briefly? MS. NIELLA-BROWN: Very briefly, please. MR. WARREN: I'm trying to explain what we are
14 15 16 17 18	MS. SMITH: Thank you. MR. WARREN: Can I answer that very briefly? MS. NIELLA-BROWN: Very briefly, please. MR. WARREN: I'm trying to explain what we are trying to do. Inspecting each country is
14 15 16 17 18 19	MS. SMITH: Thank you. MR. WARREN: Can I answer that very briefly? MS. NIELLA-BROWN: Very briefly, please. MR. WARREN: I'm trying to explain what we are trying to do. Inspecting each country is impossible, six countries that one time ship melons
14 15 16 17 18 19 20	MS. SMITH: Thank you. MR. WARREN: Can I answer that very briefly? MS. NIELLA-BROWN: Very briefly, please. MR. WARREN: I'm trying to explain what we are trying to do. Inspecting each country is impossible, six countries that one time ship melons in the United States they come from Guatemala,
14 15 16 17 18 19 20 21	MS. SMITH: Thank you. MR. WARREN: Can I answer that very briefly? MS. NIELLA-BROWN: Very briefly, please. MR. WARREN: I'm trying to explain what we are trying to do. Inspecting each country is impossible, six countries that one time ship melons in the United States they come from Guatemala, Honduras, Costa Rica, Mexico and Nicaragua, all of
14 15 16 17 18 19 20 21 22	MS. SMITH: Thank you. MR. WARREN: Can I answer that very briefly? MS. NIELLA-BROWN: Very briefly, please. MR. WARREN: I'm trying to explain what we are trying to do. Inspecting each country is impossible, six countries that one time ship melons in the United States they come from Guatemala, Honduras, Costa Rica, Mexico and Nicaragua, all of them, so they buy from this. And how in world are
14 15 16 17 18 19 20 21 22 23	MS. SMITH: Thank you. MR. WARREN: Can I answer that very briefly? MS. NIELLA-BROWN: Very briefly, please. MR. WARREN: I'm trying to explain what we are trying to do. Inspecting each country is impossible, six countries that one time ship melons in the United States they come from Guatemala, Honduras, Costa Rica, Mexico and Nicaragua, all of them, so they buy from this. And how in world are you going to have these countries inspected, it's

1	There is a lot of foolishness in this country with
2	the safe importing. That's what it is. That's
3	all.
4	MS. NIELLA-BROWN: Thank you. At this time
5	I'd like to ask any speakers that are still
6	remaining in the room to please come forward.
7	Speakers.
8	I'd like to ask you if you have any final
9	comments for the day. Michelle Smith?
10	MS. SMITH: I gave mine.
11	MS. NIELLA-BROWN: Mr. Tolen?
12	MR. TOLEN: It's late, let's go home.
13	MR. DERSTINE: I'll second that.
14	MR. CARSON: No comments.
15	MS. NIELLA-BROWN: All right. Then we'd like
16	to really thank the speakers, the audience for
17	their active participation and also we would like
18	to thank the Dade, Miami-Dade County Cooperative
19	Extension Service for hosting the meeting at their
20	facilities.
21	And one last word, if you are like me, when
22	you are driving home or flying home you are
23	thinking of several things that you should have
24	wrote up or brought up at the meeting and you did
25	not, please write them down and send your comments.



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1	CERTIFICATE OF REPORTER
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3	STATE OF FLORIDA
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8	I, Pearlyck Valiente, being a Shorthand Reporter,
9	certify that I was authorized to and did stenographically
10	report the foregoing proceedings; and that the transcript is
11	a true record of the testimony given by the witnesses.
12	I further certify that I am not a relative,
13	employee, attorney, or counsel of any of the parties, nor am
14	I a relative or employee of any of the parties' attorney or
15	counsel connected with the action, nor am I financially
16	interested in the action.
17	Dated this 26th day of May, 1998.
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