UNITED STATES OF AMERICA

CENTERS FOR DISEASE CONTROL

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NATIONAL INSTITUTE FOR OCCUPATIONAL
SAFETY AND HEALTH

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ADVISORY BOARD ON RADIATION AND
WORKER HEALTH

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84th MEETING

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TUESDAY
JUNE 19, 2012

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The meeting convened at 8:30 a.m., Mountain Daylight Time, in the Courtyard Marriott, 3347 Cerrillos Road, Santa Fe, New Mexico, James M. Melius, Chairman, presiding.

PRESENT:

JAMES M. MELIUS, Chairman
HENRY ANDERSON, Member
JOSIE BEACH, Member
BRADLEY P. CLAWSON, Member
R. WILLIAM FIELD, Member*
MARK GRIFFON, Member
DAVID KOTELCHUCK, Member
JAMES E. LOCKEY, Member
WANDA I. MUNN, Member
JOHN W. POSTON, SR., Member
GENEVIEVE S. ROESSLER, Member

PHILLIP SCHOFIELD, Member
PRESENT: (Continued)
LORETTA R. VALERIO, Member
PAUL L. ZIEMER, Member
TED KATZ, Designated Federal Official

REGISTERED AND/OR PUBLIC COMMENT PARTICIPANTS

ADAMS, NANCY, NIOSH Contractor
ANIGSTEIN, BOB, SC&A
ARENDS, JONI
BAROS, JOSE
BAROS, LEROY
BEAUMONT, HOLLY
BEAVERS, DANIEL
CATECHIS, JENNIFER, Rep. Lujan 3rd District of New Mexico
CRUZ, RUBEN, CDC
EVASKOVICH, ANDREW
FITZGERALD, JOE, SC&A
FROWISS, ALBERT*
FUENTES, JERRY
GLOVER, SAM, DCAS
HANKS, LINDA
HAYES, SAMMIE
HINNEFELD, STU, DCAS
JACQUEZ-ORTIZ, MICHELE
JOHNSON, KAREN*
JOHNSON, MARY*
KINMAN, JOSH
KOTSCH, JEFF, DOL
LEWIS, GREG, DOE
LIN, JENNY, HHS
LUJAN, BEN, US Congressman, 3rd District of New Mexico*
MACE, CARI
MAKHIJANI, ARJUN, SC&A
MARTINEZ, CIRILIO JAKE
MCFEE, MATT, ORAU
MERRITT, MAUREEN*
MONTOYA, REBECCA

NETON, JIM, DCAS
ORTIZ, RALPH
RAEL, LOIS
REGISTERED AND/OR PUBLIC COMMENT PARTICIPANTS: (Continued)

RUIZ, HARRIET
RUTHERFORD, LAVON, DCAS
STIVER, JOHN, SC&A
TONGATE, BUTCH
TRIPLETT, TINA*

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

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

(8:30 a.m.)

CHAIRMAN MELIUS: If everyone would get seated here, we'll get started. Welcome and I'm Jim Melius, the Chair of the Advisory Board. And I'll turn it over for Ted for roll call.

MR. KATZ: Yes, welcome everybody. This Advisory Board on Radiation and Worker Health, I'm Ted Katz. I'm the Designated Federal Official of the Advisory Board and I wish to welcome on behalf of Secretary of HHS, Sebelius and the Director of NIOSH, John Howard.

Let me for folks on the phone and in the room, in the room all the materials that are being discussed today are on the back table. For folks on the phone, all of the materials, all the presentations today you should find on the NIOSH website under the meetings section. You'll find today's date under the meeting session and if you click on that all of the presentations should be attached at that link.

Let me just ask too while I have

your attention, folks on the phone please mute your phones, except for those Board Members and others who would be addressing this group when they're ready to address it. Otherwise mute your phones. If you don't have a mute button, for people on the phone, press * and then 6. That will mute your phone. And to unmute your phone you press * and 6 again.

And also for everyone on the phone please at no point put the call on hold, but hang up and dial back in if you need to leave the call for a period. Thank you for that. We'll run through, let me just for everyone in the room whose going to be using these mics, it's very important that you speak close to the mic so that people on the phone can hear you. So please remember that. Let's do roll call for the Board.

CHAIRMAN MELIUS: And why don't we, people around the table here, why don't we introduce ourselves. And since we have our two new Members here, what I thought would be helpful if everyone can sort of

give a, when you introduce yourself give a brief, you know, who you are, you know, born in a log cabin kind of intro. Just to help them understand whose who and so forth. And we can start with Wanda.

(Roll Call.)

CHAIRMAN MELIUS: Okay, let's get started. We've got a busy agenda and we'll, some people need to leave and so forth. So we'll be sort of hopping around a little bit in between the, some of the SEC presentations and so forth. And so we'll get going here in a second. And I thought we'd start hopping on maybe LaVon could get it. We've got to keep them awake here. We'll start with an update from NIOSH from Stu Hinnefeld, Stu?

MR. HINNEFELD: Thank you, Dr. Melius. Assuming my computer starts up we'll be okay. Thank you all. I'm, for those in the room who don't know me, I'm Stu Hinnefeld. I'm the director of the Division of Compensation Analysis and Support for NIOSH. It's the division of NIOSH that has responsibilities in the energy employee's

program.

I'm here today to present some news updates. My presentation has not only the slides I'm going to cover, but also several slides of statistics having to do with a program, where we are in the program in terms of number of claims and stuff. That's all in the handout in the back and it's posted on our website.

And I believe the Board Members all received that. I'll just go through a few news items and then if anyone has any questions on that or on any of the information in the rest of the presentation, I'll try to answer what I can.

In terms of program news, I wanted to mention a couple of staff changes that effect some of the activities of the Board because some of our, two of our health physicists who were engaged in certain sites and were sort of our key spokesmen on certain sites, have left our organization and gone to work elsewhere. One was Chris Crawford who was our, one of our primary spokesmen on the Linde site.

And the other is Brant Ulsh who has historically been our main spokesman at Rocky Flats and other places as well and also Mound, which we're talking about at this meeting. Rocky Flats we expect to talk about next meeting. We've also had the departure of one of our public health advisors. Brought that staff down to a level of four, but we seem to be able to get along with that number of people.

We used to have almost twice that many, but we used to get many times as many phone calls as we get now, now that we're kind of up to date with claims the phone call load in that area has come down and so our staff has adjusted downward kind of appropriately for the workload. The rest of what I have on my presentation is some discussion about webpage updates. Specifically, with respect to the Advisory Board's portion of our website.

Part of our efforts to improve communications to our claimant population have involved our website, how the information is written and how it's

presented. We also have certain institutional constraints that are placed on us by NIOSH in terms of website construction. And so some of our changes are made to conform to those institutional requirements that come from our organization.

In particular, with respect to the Advisory Board site, we used to have on very long, very large Advisory Board page that you could choose a topic and you would jump down that page to that topic. So you could navigate it reasonably well. But it was all on one page.

That's, we've, in recent past we've divided that into multiple pages that navigates very much the same. You still have a menu. You pick your, you know, a topic here listed off from that menu. And instead of jumping down the page it jumps to a different page. So anyway, on the slide here are the various categories that the Advisory page, has, Advisory Board's page has been broken into.

We've also included, in the

current work activities of the Advisory Board, this was done at Dr. Howard's request, to display the items in terms of Special Exposure Cohort petitions that are, have been presented to the Board and are under discussion. Now this is just a screen shot. This is not the entire page. This is just a screen shot that I can get up. I'm not actually online.

But it will show when products are delivered and the Class and things like that and the discussion still going on. So that's been placed up there. And I believe the navigation is clear, although I haven't tried it today. But I believe it's fairly clear how to get there from our website.

We've also redesigned the SEC section of the individual site pages. One of the organizations of our website is you can go to covered sites, go to the list of covered sites, click on the site you want and then it will show you information about that site.

And for sites that have a SEC action of some sort, rather they have an SEC

Class has been added or whether they have a petition that's either been decided or is undergoing the discussion process, that information is displayed now in tabular form. And so, and it contains more information on the number of petitions we've received, et cetera, et cetera.

Now this particular redesign is not complete for all sites. We're putting it together sort of a site at a time. And so some of the sites have been redesigned this way and some have not. The next screen shot relates to Hanford, which is one of the sites that was, has been redesigned in this fashion.

And you can see that, when you bring that up, if you would click on any of these links to the petition number it will take you to a table for that petition. And see here where you can see all the petitions are qualified. And here's an example of the table that it will take you to if you click on any of those petition numbers. It will take you to a table that looks like this.

It shows the date received, date

qualified, a little bit of summary information about it. And then there are links to the documents associated with that petition as well. Okay, that concludes actually what I wanted to talk about in terms of the news from the redesign. Like I said, that redesign is going to continue on.

Not all the sites have been redesigned in that fashion yet. But that's what I intended to present. The rest of the presentation is statistics, which I typically don't slog through up here in my presentation. So I'll be glad to answer any questions anybody has about any part of this.

CHAIRMAN MELIUS: I think, Stu, you got to give us time to go through the -- why don't you briefly just, you know, flip through the slides. You don't have to present the data, but since we're all seeing these for the first time it's hard to --

MR. HINNEFELD: Okay.

CHAIRMAN MELIUS: -- and I'm afraid we'll get scattered if not.

MR. HINNEFELD: Sure. Well we

have the overall initial claim information. These are the claims that are referred to us. We've, just over 37,000 now claims have been referred to us by the Department of Labor.

Most of them have been returned one way or another. The cases that are pulled from DR for SEC, that 3,000 cases, those are, I would guess with very few exceptions we may have pulled one that for some reason after reevaluation by Labor didn't get paid.

But generally those are case, those are claims that are compensated via an SEC that was added because of the work of the Advisory Board. You know, in other words, SEC Class did not exist when the claim was filed. The Department of Labor referred it to us and so we had this claim in our possession. The decision was made to add a Class to the SEC that effected that claim.

And so we pull those and send those back, we call those pulled for SEC. So there is an additional 3,000 claims that

are compensable in addition to the almost 9,000 that have been compensable through dose reconstruction.

The number of cases that we actually have in front of us to do is around 900 or maybe a little shy. These dates, these data are a few weeks old. The 220 initial draft dose reconstructions that are in the claimant's hands, we kind of subtract from that 1,100 number on the previous slide, in terms of the ones we have to do. That 1,122, so we've actually done 220 of them and sent them, the draft to the claimant.

So we're somewhere just right around 900 cases that aren't, you know, total in our inbox. It's a little different than the, I think, 10 or 11,000 we had a few years ago in our inbox to do. Our statistics in terms of being able to show causation through dose reconstruction has been pretty steadily around 30 percent for a long time.

For the cases that go through dose reconstruction we have about 30 percent

success rate in being showed causation. And this is our distribution of probabilities of causation.

It's a little, you know, the fact that everything above 50 percent is shown in one of the bar charts, one of the bars in the histogram kind of skews things a little bit. But you can see there are a great number of claims that have a very, very low PoC number and a fairly small number as you approach the decision point, relatively speaking.

Submittal versus production rate has been relatively steady. There was a little influx around the end of the year. Claims, we had a little uptick in claims we were getting from the Department of Labor. I don't that we ever learned why that was.

Sometimes an addition of a Class if it's a large Class or it's a large facility, may prompt a bunch of additional claims. And not all those claims will necessarily be paid through the SEC. Anytime one of the SEC cancers get claims so we may get an influx because of that. I

don't know if we ever really diagnosed why we had that influx there around the end of the year.

But it has come back down to the levels we have been experiencing for a couple years before that. And then we also include our status of the first 5,000 claims. Anything in the first 5,000 or 10,000 claims, that's not done these things are in dose reconstruction and we're gathering information.

These claims have been returned to us in the past, certainly within the past year. Usually within the past few months. You know, we often get a claim returned back to us when the claimant comes down with an additional cancer. That's the most common reason why we get a claim back. They'll get an additional cancer and it will come back for us to rework the dose reconstruction. Same kind of explanation on the 10,000 claims.

I believe DOE's response on records requests, I think this might be a slight improvement from last slide. It's a

fairly steady performance. I mean there is not really much of note that raises our eyebrows there. And a summary of the Special Exposure Cohorts.

We are up to 204 petitions received and we have added 89 Classes. And this used to be a pretty even split. The 83.13's have pulled ahead here in the last six months or so, or maybe the last year or so.

CHAIRMAN MELIUS: Okay so Mark.

MEMBER GRIFFON: Yes and Stu, on that last slide the last bullet says represents 48 or 4,081 potential claims. First of all I don't think you want to say potential claims because on this, I mean that, those time periods are always open so.

MR. HINNEFELD: The reason we say that is that by our statistic that's how many we found. They may not all get, they were all, certainly they were all claims. They were certainly all actual claims. They may not have actually gotten paid through the SEC because of some piece of information that was not part of our query when we ran

that.

MEMBER GRIFFON: But I mean in the future if someone could always qualify for that SEC Class?

MR. HINNEFELD: Absolutely.

MEMBER GRIFFON: That's the definition right, so?

MR. HINNEFELD: We would never see those claims.

MEMBER GRIFFON: Potential, anyway. That's one sort of --

MR. HINNEFELD: The word potential is in there is because we can't guarantee that number actually went and got paid through the SEC. Because there may have been something that, some qualifying factor that we didn't see in our poll that they did not. So some of those may not have actually gotten paid, although they look like they would have to us.

MEMBER GRIFFON: I guess the second more important question was 4,000 to me with 89 SEC Classes that's like an average of 45 per response. It seems awful small. Some of them are very small.

MR. HINNEFELD: Well Bomber might be able to speak that better than I, but some of these SEC Classes are very small.

MEMBER GRIFFON: There were only a few people. I know, yes.

MR. HINNEFELD: We have, remember a lot of the 83.14's, we've been adding a lot of 83.14's because we couldn't, you know, we couldn't find their information, we've added those. We don't have very many claims from a lot of those. And so that's why they were researched late and those decisions were made fairly recently.

CHAIRMAN MELIUS: Yes, but I think if you look at least the DOL website and probably Jeff will present this, but I think the amount of claims paid through the, at least the money, I think the number of claims paid through SEC is about even with the numbers paid through direct --

MR. HINNEFELD: Yes, and see the majority of those we don't see.

CHAIRMAN MELIUS: Yes, exactly. I think that was Mark's point --

MR. HINNEFELD: These are the

claims that got to us.

CHAIRMAN MELIUS: The 4,000 is not really representative of --

MR. HINNEFELD: Right.

CHAIRMAN MELIUS: I mean if you look back to, I sort of noticed the same thing in it earlier. It's like look at the first 5,000 claims that you pulled 400 or 378 for pulled out for SECs. The first 10,000 and you're up to 1,001 pulled out for SECs.

So it's, you know, early on there weren't many SECs so, you know, they get, but what happened also I think if claims that were turned down early, rejected through, you know, because it didn't meet Probability of Causation, DOL would then reopen and when the SEC was granted. And those again you would never see.

MR. HINNEFELD: We would not see those back and so --

CHAIRMAN MELIUS: And so that's the other part of it, yes.

MR. HINNEFELD: Right.

CHAIRMAN MELIUS: The other

question I have was about the time it takes to process claims. Maybe you mentioned it, but I didn't see it in the slides. I know you had a, I thought you had a target for that and I was just --

MR. HINNEFELD: We complete now, you know, I won't say this is 100 percent because once in a while there's a straggler that goes beyond nine months. But we complete the claims within nine months of when we get them, almost without exception. There are a couple categories of claims that have been around for a long time that we're hoping to be able to resolve actually at this meeting.

A couple of sites that have been around for a long time. But for the most part, claims are done within nine months. And really most of them are done within six months of when we get them.

CHAIRMAN MELIUS: And just out of, I have two other questions out of, one's just sort of curiosity. The first 5,000 you have one claim that you're gathering information on.

MR. HINNEFELD: Well that's the, we have this set of situations or statuses, you know, internally we don't call them statuses. We put claims into either we are collecting the information on the claim, or a dose reconstructor is working on it or it's, you know, in review.

And this is one that's been, I'm confident this is one that's been reopened within the past certain number of years, maybe for additional employment or something. And so we're back in, it's not given, it's not assigned to a dose reconstructor yet to do. We have information to gather before we could assign it to a dose reconstruction. But I'm confident that's a reworked case, one that was done once and is back.

CHAIRMAN MELIUS: Okay. And then my other question is about the DOE request. You have 41 requests greater than 60 days. Are there any particular sites that, since we'll hear from Greg --

MR. HINNEFELD: Well there are sites that are problems, but I don't know

that I'm entirely current, extremely, you know, on which ones are. Because it's not the same site all the time, you know.

Sometimes a particular site will get behind and then they'll catch up and it will be somebody else. So I'd hate to single anybody out here because I don't really know who the culprits are now. I don't know if Greg knows or not.

CHAIRMAN MELIUS: Yes, I guess it would be helpful if when you're reporting, since we're together and DOE is here and so forth, just to if there are persistent offenders or whatever you want to call them or persistently slow sites.

MR. HINNEFELD: Well we've had some of those but I know at least one has been catching up and so I'd hate to call it out in case it has caught up.

CHAIRMAN MELIUS: Or they're listening in.

MR. HINNEFELD: Right.

CHAIRMAN MELIUS: We'll let you go this time, but we want names. Anybody else have questions? Yes, Brad.

MEMBER CLAWSON: Stu, it said here that you had 14 SEC's that didn't qualify. Correct on that?

MR. HINNEFELD: Yes, I think so, there are a certain number.

MEMBER CLAWSON: I guess this is more for Dr. Lockey. I thought we had a Work Group to be able to review those that didn't, you know, kind of went into limbo. We had a pile of them that were there. I was wondering if we have reviewed any of these?

CHAIRMAN MELIUS: That was a one time review. I hate to think how long ago but --

MEMBER LOCKEY: Five years ago.

CHAIRMAN MELIUS: Five, it's more like, yes.

MEMBER CLAWSON: So we're not, I want to make sure that we weren't falling down on something there.

CHAIRMAN MELIUS: No, no, we had agreed that was a one time thing. That is not a charge to the Board. We don't, we're not involved in the process. In fact,

originally the Board decided, before your time, decided we would not be involved in that part of the process.

MEMBER CLAWSON: Okay. I just wanted to make sure we weren't slipping.

MR. RUTHERFORD: I wanted to clarify that too on there, that's SEC Classes denied. That's not qualification, so, am I correct on that slide, Stu, if we go back? That's SEC Classes denied. So that was a determination by the Board and HHS.

MEMBER CLAWSON: Okay. Thank you.

CHAIRMAN MELIUS: Any other questions? Okay. Thank you, Stu. Right on schedule and Jeff.

MR. KOTSCH: Good morning. I'm Jeff Kotsch with Department of Labor. I'm the senior health physicist and the supervisor of the medical and health science units there. And I should note that Stu's loss of Chris Crawford was our gain because he's our new health physicist. So at least he's still in the family.

Just a quick overview of the Energy Employees Occupational Illness Compensation Program Act enacted in October 2000. There were two parts back then Part B which still exists obviously, which is primarily what we discuss here. And Part D, which was the State Worker's Comp. Assistance portion which was administered by DOE.

In October 2004, the Congress abolished the Part D and created the Part E which is now with us and which is essentially the toxic exposure portion of our program. We've had about 154,000 cases filed and have paid out about over $8.1 billion in total compensation to date.

And at the bottom, you know, there are, the Department of Labor obviously based in Washington, but we have four, for this program, we have four district offices, Jacksonville, Denver, Cleveland and Seattle. We've referred about 37,500 cases to NIOSH for dose reconstruction. And NIOSH has returned about 35,500 cases.

See the breakdown there is about

30,000 have had dose reconstructions and about 5,500 came back without dose reconstructions for various reasons, primarily probably involving the fact that we pulled the cases for SEC Classes or we didn't have sufficient information to continue the case.

And we're showing, and our statistics always vary a little bit with NIOSH's, we're showing a little over 2,000 cases currently at NIOSH. And the breakdown there, a little over 1,100 for initial referrals and 917 for reworks or returns. Again, as Stu mentioned, the reworks primarily are because of new cancers of the employees still alive. Or the second major cause is new employment.

There are some minor issues sometimes that result that are a rework, but those are probably 90 percent of the reasons that things go back. And unfortunately, sometimes they go back and go back. And we've had some cases I think reworked four or five times probably.

It's just an overview in a pie

chart of the roughly 3,000 cases that have been returned by NIOSH with a dose reconstruction and a breakdown of the final approvals and final denials. 35 percent final approval, 65 of denial. And this slide is the Part B cancer cases which have had final decisions to accept, about 80 to 169 cases have been accepted with dose reconstructions.

You see a number there of 11,000, over 11,600 payees again. The payees are the claimants, that number is always larger than the number of cases because there may have been a survivor situation. There's usually more than one survivor. For those cases we've paid about $1.2 billion in compensation.

For the accepted SEC cases, which are about 16,300 and you see there are 26,700 plus payees that's been total compensation of 2.38 billion. And then as you go down cases accepted for both SEC and PoCs, PoC rated 50 for the medical benefits. You see the numbers there. 690 roughly payees and $83.8 million in compensation and

the bottom line totals at the bottom, $3.6 billion in compensation for over 25,000 cases.

And just a line chart of the final decisions for the covered applications for the Part B cases. And on the right side a bit of the breakdown. Primarily the green are the 16,000 roughly cases with a PoC less than 50 percent. The next reason the medical information insufficient to support the claim, that's a little less than 6,000.

There are occasions when we don't have, when the survivor information is insufficient to provide eligibility for the program. This slide is data we were unable to with our system, we had a problem, to update the facility. So these were for the first quarter of fiscal year 2012. At the next meeting we'll definitely get an update.

But these were the four sites that were showing the highest number of new cases, Part B cases, Sandia National Lab, Hanford, Y-12, Savannah River. The bottom three are usually the, in the top four anyway.

Just a little bit about SEC outreach. During fiscal year 2012 we've had six town hall meetings and traveling resource centers with regard to the new SEC Classes. Sandia National Lab had one in this past November as did GE Evendale. And the Y-12 plant had one, we had one down in the Oak Ridge area January of this year. There was one at Pantex, near the Pantex plant in March of this year. And Savannah River Site and Linde Ceramics had their meetings in April.

We get asked sometimes, you know, in the cases with the smaller SECs, the primary mechanism to get the word out is through press releases. But you'll see some other information, some other mechanisms too.

This slide is on the outreach to, for covered facilities that have 50 claims or less. The people involved in our outreach, they went through an exercise where they tried to identify covered facilities where there were less than 50 claims. Obviously the majority of those are

AWE sites, they're relatively small and scattered around.

In that effort, they've concentrated an effort to notify individuals who've worked at these facilities for potential benefits, including press releases, reaching out to Unions, local government and other key stakeholders. And, you know, utilizing our local resource center staff as best we can. Because they are usually familiar with the community, the workers out there.

And I think Greg will probably talk about this too, so I'll just briefly go over it. The existence of the Joint Outreach Task Group, which is comprised of Labor and NIOSH, DOE, our Ombudsman, NIOSH's Ombudsman and representatives from the DOE Former Worker Medical Screening Program. They have monthly conference calls and they do have an upcoming Task Group meeting, town hall meeting, with regard to the Brookhaven SEC up in Upton, New York on July 17th.

And the next two slides are just summaries. I'm not going to through most of

them. We summarized the information, the compensation information, the case information for either sites that are on the agenda for this meeting or local sites. So in this case you'll see a number of the sites, Winchester, Weldon Spring, Hanford, Clarksville, LANL which is a local facility where we've had 6,734 cases.

A little over 2,000 final decisions for Part B. 1,244 Part B approvals. 1,332 Part E approvals and total compensation including a bill paid, a medical paid of over $305 million. Then other facilities, Mound Titanium Alloys, Medina, Linde Ceramics and Sandia Labs, which is another local one at a little over 1,900 cases. 632 Part final B decisions. 345 Part B approvals. 361 Part E approvals. And total compensation, including medical bill paid $76 million, almost $77 million.

And then behind that is just, in the handout, is general information on, you know, elements of the program. Are there any questions?

CHAIRMAN MELIUS: Questions for

Jeff? Jeff, do you have any idea on what the turnout's been at some of those outreach meetings?

MR. KOTSCH: I didn't go, Stu might help me or LaVon, because I know the one was pretty good recently.

MR. RUTHERFORD: The one at Pantex there were 150, I believe 150 people there, at the morning session. And there were roughly 75 at the second session. So they were pretty well attended, both of those sessions. Savannah River as well.

CHAIRMAN MELIUS: Okay.

MR. KOTSCH: So overall those have been, seem to have been productive endeavors.

MEMBER ZIEMER: I'm particularly interested in what the GE and Cincinnati turnout was. You know, we struggled with who should be in that SEC.

MR. HINNEFELD: I was actually at that. I went to that one. There were, we scheduled two sessions. There were maybe 30 to 50 at one session and nobody showed up for the other one. One person came, was

interested in the status of her claim. Labor just helped her and we didn't even have a second meeting.

MEMBER ZIEMER: Stu, do you have any feel for those who attended whether or not they were actually involved in the nuclear work at GE?

MR. HINNEFELD: It was a mix I believe.

CHAIRMAN MELIUS: Even 30 to 50 is still pretty good for a scattered, yes, scattered around, anybody know at Linde? That was another one that was --

MR. KOTSCH: Yes, I'm just trying to, I mean I've heard the reports. What's that?

Yes, I don't know that there was much. I mean I think we did do a traveling resource. But I'd have to check, I'm not sure of that number. I don't think you guys did, but I just can't recall the level of interest. I can check though.

CHAIRMAN MELIUS: It would actually be helpful when you're reporting on these if you can at least give us some

ballpark numbers and so forth. Because I think we're trying to understand what the impact is and how the word gets out. Because there's some sort of disparities between the sites and it's sort of hard to understand.

MR. KOTSCH: Well that's easy enough to do.

CHAIRMAN MELIUS: Yes, sure, appreciate that. Any other questions for, okay. Moving along, Greg.

MR. LEWIS: All right. Good morning everyone. I'm Greg Lewis and I'm with the Department of Energy Office of Health Safety and Security. And I'm here to talk to you about the Department of Energy's role supporting both NIOSH and DOL in the EEOICPA program.

DOE's core mandate is to work on behalf of the program claimants to ensure that all available worker and facility records and data are provided to DOL, NIOSH and the Advisory Board. So as most of you know, our basic role in the program is to provide records and information.

We have three main responsibilities to, you know, as far as providing records and information. We respond to individual requests for information, those are employment verification and, you know, requests for exposure records in DOL and NIOSH. We also provide support and assistance for large scale records research projects such as the SEC evaluation projects or Site Profile reviews.

And then our third responsibility, which is somewhat smaller but equally important, is to conduct research in coordination with the Department of Labor and NIOSH on covered facility destination issues. And before I talk about those three responsibilities I just want to talk about our EEOICPA site point of contacts.

We actually have one here with us today. Philippa Griego is from our federal point of contact from the Los Alamos National Lab. Our site POCs coordinate all of the research activity with NIOSH and DOE.

They set up visits, records reviews, tours. They'll call back the right records from federal records centers, things like that.

They'll help identify relevant workers that are either on site or that are retired so NIOSH or DOL can interview those workers as subject matter experts. And they manage the site response to the records request from DOL and NIOSH, which is, you know, we do about 16,000 records requests a year which I'll show later on.

So there's quite a few out of the sites. And as you saw, you know, those top few, top four sites receive quite a bit of, quite a number of requests from them. So as far as individual records requests, we do about 6,000 employment verifications for DOL. About 4,500 dose reconstruction requests from NIOSH.

And about 5,500, what we call, document acquisition requests, DARs, which those are basically requests from DOL for all of the exposure information related to an individual. So it would be medical information, radiological monitoring

records, incident accident reports, human resource records, things like that.

And I guess now would be a good time, I know there were some questions earlier about the number that Stu showed in his presentation about number of claims over 60 days. I don't have an exact breakdown, but my guess probably one of the sites, which is a local site that we struggle with recently, has been Sandia National Lab.

I think you also saw in Jeff's presentation that they were the top site in terms of the most requests recently. And I think he alluded to this, but the numbers two, three and four on that list I think Y-12, Hanford and Savannah River I believe are usually the top three. They're always up in the top four. Sandia there is the exception.

Sandia has had a tremendous number of new requests. I think primarily due to the SEC or even at least due to all of the attention given the SEC they might not all be SEC claims. But just because of, you know, media attention and outreach

events, things like that when SECs come through, often there's a huge boost in claims. So, you know, that alone oftentimes our sites will start to fall behind a bit when there's an SEC and a huge volume of claims.

And it's been compounded in Sandia due to some staffing issues and the fact that there, some portions of their radiological records are not organized in the fashion that makes them easy to get to. We had attempted to address that before by creating the database.

We're still working together with NIOSH, but the bottom line is they're mostly handwritten information and the records that we have I think are many times copies of copies of copies. And so when we try to enter that into some kind of index, it's a tremendous data entry project and given the difficulty reading some of the records it was hard to do that in a manner that enabled us to search.

So we are still working on that at Sandia. We're working through these

claims. We're trying to get back current. But I do think that's probably the site that is responsible for the largest part of those claims.

And as I mentioned before, we do about 16,000 records requests per year. That number is going to be different than probably both what NIOSH and DOL shows. The primary reason is because people may have worked at multiple sites. Especially somewhere like Oak Ridge a lot of the people moved around.

So even though it may be one claim, we may have to go to K-25, the Oak Ridge National Lab and Y-12. So we count that as three separate requests because three sites are having to do the full workup to find records.

And in addition, our records responses can be hundreds of pages long, even thousands of pages long in, you know, in certain cases. It's not a situation where our sites go to one comprehensive database and pull a single file. We often have to go to, you know, four or five site

departments, pull extensive records from multiple different types of, you know, types of media including microfilm, microfiche, databases, scanned records, hard copy records, things like that.

And so, you know, one site routinely checks about 40 different individual sources for records. That might be on the high end, but typically all of our sites go to, you know, 15 to 20 different sources for records, especially if the individual worked at a site for 20 or 30 years, which many of the employees did.

So our second major responsibility under EEOICPA is to support the large scale records research projects. Those can also be difficult because they're driven by the needs of DOL and NIOSH. We have to make sure we have the right funding in place to support the request. And it's also difficult to determine the full scope of the project until either DOL or NIOSH gets in there and starts to gather information.

We also have to review many of

the records collected for these large scale research projects through our classification office, depending on the site and depending on the subject matter. So we've reviewed millions of pages so far and, you know, we have a security plan that we've put in place that governs how and when we do those reviews.

We try to make those as timely as possible. I have a slide on that later. But we occasionally run into trouble with timeliness given the other demands and the other things going through the review process. But we do the best we can to make sure to get those back in a timely fashion.

Currently these are not all the projects that we're working on, but currently we've been supporting data capture efforts at, you know, the following eight sites on here. I know there's a meeting, I believe next week down in Pantex to review Medina and Clarksville records and I'm sure Pantex as well. And both Los Alamos and Sandia the local sites have been supporting data capture efforts recently as well.

And then this, back to the document reviews. The link on the screen there is to the DOE EEOICPA security plan. I believe the Board also has a security plan as well as NIOSH that governs, you know, how and when we do the reviews and interviews and you know, the precautions taken to make sure that, you know, sensitive information is talked about and reviewed in an appropriate location.

Since the, since February of 2012, since the last Board meeting DOE headquarters has reviewed 52 documents for classification review. The average turnaround for those reviews has been eight working days. And in certain cases we've gotten them back in two days. Now I know sometimes at the sites it's a little bit more difficult.

At headquarters we have more direct control and we have a good relationship with our review staff there. But at the sites there's competing priorities, there's different projects and so we do the best we can to make sure that

those reviews are conducted in a timely manner, although on occasion we do struggle on that, really work with the site to try to find a solution to get the records back in a timely manner.

And then our third major responsibility under EEOICPA is to research and maintain the cover facility database. That's over 300 cover facilities under the program both DOE facilities, AWEs and beryllium vendors. The full listing of sites is on that website. It's searchable by state, by facility, or by key word.

And we also work closely with the Department of Labor and NIOSH. All three agencies coordinate, especially given that NIOSH and DOL are often out on site in these large research projects. That's when they may come across information that might suggest a site has been inaccurately characterized or may need to add a year or take off a year.

And they'll provide those records to us. And we'll all work together to make sure that the right decision is made. So we

always have ongoing initiatives to improve our records collections. Mostly those are indexing projects.

On occasion we will scan and digitize records, but primarily the indexing projects are what we find are the most useful to make a record easier for us to locate in a more timely manner. Again, many times with these hard copy records if they're not indexed in a manner that allows us to search than we'll have to be going through large volumes of records for each individual. If we can make sure that they're alphabetized or even alphabetized by year, something like that it allows us to get to the right record and saves us time and also cuts down on cost.

And the major initiative that we're working on right now that hopefully by the next Board meeting should be fully rolled out and fully implemented is the Secure Electronic Records Transfer system or the SERT as we're calling it. For us at DOE this is probably the biggest change to how we do business since the Part D transfer to

Part E back in 2004.

Because of the tremendous volume of records reviewed, again 16,000 per year, getting sent back and forth to DOL and NIOSH we have tremendous concerns about PII, Personally Identifiable Information. A lot of these records have a person's medical records, they have social security numbers, date of birth, all of those things that, you know, in this day and age are, can be used, you know, for fraud and things like that.

So, you know, we have to be very concerned that we're protecting that appropriately. So we believe this, the SERT will both protect the information while allowing it to go back and forth quickly. Right now we're doing, you know, encrypted thumb drives through FedEx. So there's, you know, two to three days at least on each end plus time in each mail room, you know, at DOE and DOL or NIOSH.

And so, you know, we're expecting this to cut out probably five to ten days on the record process just getting the SERT up and running. It will also improve

transparency. You know, right now oftentimes the numbers between DOL, NIOSH and DOE don't quite match because we may be, you know, tracking slightly differently. This system all three agencies are going to be on it.

When DOL initiates a claim to DOE we'll see it immediately. You know, there's no we didn't see it, we didn't get it. There will be none of that. And the same thing going back. So I mean it will all be right there in the system. When it's initiated the clock starts and when, you know, when we upload the response the clock stops. So we'll, everyone will be able to see exactly, you know, the progress.

I also wanted to talk a little bit more than usual about the Former Worker Medical Screening Program. At the last Board meeting I had the chance to talk to a Board Member. And we got talking about the Former Worker Program. You know, it turns out some of the things that I was telling him, he wasn't aware of.

He thought that it might be a

good idea just to go into a little bit more detail both for those in the audience, but also for those on the Board because I do know that you interact with, you know, many workers in your day to day work especially on these SECs. So I just want you to keep the Former Worker Medical Screening Program in mind and refer folks if you think they might be able to benefit from it.

The Former Worker Program was established by law in 1993 and the first programs were initiated in 1996. We now serve all former federal contractor and subcontractor workers from all DOE sites. Our mission is to identify and notify former workers at risk for occupational disease, so outreach. We do outreach and, you know, as Jeff said we partner with DOL and NIOSH in the Joint Outreach Task Force.

And actually one of the things that I'd like to talk about there when you're, you know, you're asking about attendance for some of these meetings, the meetings that the Former Worker Program attendants participates in both Joint

Outreach Task Group meetings and sometimes the SEC, you know, the SEC meeting that's held by a site.

Our Former Worker Programs have worked with our DOE sites over the last ten years, but particularly over the last three to try to obtain as many worker rosters as possible. And so we oftentimes have the most comprehensive list of former workers at a site between DOL and NIOSH. And we will use that list to mail in advance of these Joint Outreach Task Group meetings and the SEC meetings.

So we'd like to think that some of the well attended meetings recently have at least partially been because of the list that we bring to the table. And I know we're hopeful the Brookhaven meeting July 17th was mentioned, and I know in the past it has been difficult to get a large number of Brookhaven workers out to a meeting.

And we have a roster that we obtained recently from a site with, I believe, it's over 5,000 names. So we're going to be mailing to, I think, over 5,000

people in advance of this meeting. So we're hopeful that, you know, if we can't get a well attended meeting with that list with that list, than I don't know what to do, so.

The second thing, so obviously we do outreach to identify the workers. We offer medical screening and over 68,000 individuals have received a screening. And over 17,000 have come back for a rescreening. Then third, we provide information assistance about medical follow up.

So, you know, if the results are abnormal in any way, we'll make sure to refer the person to either their personal physician or a specialist. If they don't have one or aren't sure where to go, we'll do our best to help guide them in the right direction.

And then we also work with them to refer them to the compensation program, if necessary including writing a results letter that we hope is helpful to DOL when they adjudicate. And sending the person over to the research center or an

appropriate place to apply for the program if they so choose.

And then the fourth thing, is to use the findings to, as a feedback loop to the extent possible of the current sites to help improve current worker, you know, safety and health. So we work through third party providers. I won't talk too much about this, but we have two national projects and five regional projects.

They're not directly DOE programs. They're cooperative agreement holders funded through universities and unions. So we don't have direct control. They conduct the screenings independently, although we are very involved.

The organizations that administer the Former Worker Program are the CPWR, the Center for Construction Research and Training from Drexel University, Johns Hopkins University, Oak Ridge Associated Universities, the Queens College of the City University of New York system, the United Steel Workers and the University of Iowa.

And just skip forward, the local

program for both New Mexico sites, Los Alamos and Sandia, is run through Johns Hopkins University and the principal investigator is Brian Schwartz. And the information is listed there.

And then just to talk a little bit about, you know, what they do, there's a comprehensive physical examination that they do for everyone that comes through the door. They tailor it to the worker based on a occupational history questionnaire that we give them. So depending on where they worked and what they say they did we may give them a different battery of tests.

Some of the tests that we'll do are a basic physical, a chest x-ray, spirometry, blood chemistry, urinalysis, audiometry and, you know, other tests based on exposure like the BeLPT, which is the beryllium lymphocyte proliferation test, so. You know, so our program benefits the workers by hopefully resulting in the identification of conditions at an early stage when going for more successful treatment.

That of course depends on, you know, when they come to us. But hopefully we identify it as early as possible. And then we also include some additional, you know, we'll identify some additional non-occupational health conditions like high blood pressure, diabetes or elevated cholesterol.

Those are just things while we're conducting the tests we see those anyway. So we felt it was at little or no additional cost and we provide an added benefit to these workers. So we do that while we're doing it. And then of course as I said, the medical results can be useful for the compensation program.

We have screened workers in all 50 states, Canada and Puerto Rico. We'll screen workers close to their house. If there's not a local program set up for them, we have local programs that are around specific sites as I mentioned for Los Alamos and Sandia, Johns Hopkins does the screenings.

But if someone worked at Los

Alamos or Sandia and has retired to Florida, we can screen them there through our national supplemental screening program that works through a network of clinics nationwide. And we can usually with very few exceptions screen individuals within 50 miles of their home.

And I have brochures that I'm going to pass out to the Board Members and then I'll leave a few extra copies on the table in back. And the brochure gives some basic information about the program. It's also available on our website at the link you see there.

And then we have our Former Worker annual, Former Worker Program annual report, which is a big, thick report that we put out every year. That's also on our website. I didn't bring copies of that because obviously it's too heavy, so. But you can find it online and it has a wealth of information and stats from each of the sites, extensive information about each of the programs and more than you'd probably every want to know about the Former Worker

Program.

So I encourage you to take a look at the annual report. And so with that does anyone have any questions?

CHAIRMAN MELIUS: Questions, Greg, yes, Henry.

MEMBER ANDERSON: What are the criteria for the rescreening exams?

MR. LEWIS: Typically we'll do the rescreening three years after the initial screening. And, I want to be careful answering that question, because the different programs have some different requirements for the rescreening. And we also say three years, but if someone has a specific concern about something, you know, we might be very willing to do a rescreening earlier than three years if there's a specific concern. We'd handle that on a case by case basis.

MEMBER ANDERSON: Because I was wondering if this was just the beryllium program or the rest --

MR. LEWIS: No, it's everyone is potentially eligible for a rescreening.

MEMBER ANDERSON: Okay. Thank you.

CHAIRMAN MELIUS: Other questions? Yes, Brad.

MEMBER CLAWSON: I just wanted to question that eight day turnaround. I think we're a little bit shy on that. I'd like to compliment DOE on what they have set up, especially in Germantown, to be able to utilize that as a storage facility for our classified information.

But I would suggest that if these sites are overwhelmed with it or whatever, that they get in touch with you and we ship what they can't do to Germantown.

MR. LEWIS: Well and we've done that in the past and it is a last resort. But I'll also say that the Germantown group is also, you know, extremely busy. I mean, they're not necessarily just sitting around waiting for work. So we will do that.

But they have told me in no uncertain terms that is a last resort. And that if at all possible it should be done at the sites. But again, you and I know, I

mean we have sent things to Germantown in the past. And we'll do so in the future.

You know, it's particularly tough for classification officers because unlike, you know, processing claims I mean there is certainly some training involved in getting someone up to speed processing a claim, you know, for sending the records back. But with a classification officer the amount of training that they go through takes years to get them up to speed to sign off on the final review.

And so if there's a bigger volume of work it's very difficult to hire additional workers. And on occasion, especially for these SECs, we've brought back retirees that are willing to work on a part-time basis because retirees, you know, retired classification officers or declassifiers are really the only place where we can find that level of expertise without a very sensitive training program. But we're trying.

MEMBER CLAWSON: And I understand that. But when we have some that are held

up for two months because somebody took vacation, that, you know, we've got a lot of people out there. I do appreciate and you guys have made a marvelous effort and you have turned around some incredibly fast for us. I just, I think there's always room that we can improve, I just appreciate it.

MR. LEWIS: Absolutely in certain sites more than others, we are certainly trying with those sites.

CHAIRMAN MELIUS: Brad, you occasionally go on vacation.

MEMBER CLAWSON: Mentally.

CHAIRMAN MELIUS: Yes, physically too. Any other questions? We have maybe some site specific questions coming up as we start talking, some of the updates. We've got you warmed up at breakfast, forewarned at least the two sites I know about I have questions about so.

Okay. Thank you. Thank you for the update on the medical program also, the predecessor to this program in many ways. Okay the next item on our agenda is the 10-year, which is really just an update from

any of the Work Groups in NIOSH on their progress on the various support going on, on the 10-year review. I think most of it's been assigned out to Work Groups.

I know, I can give you a brief update which actually is I think the same as I gave at the last Board call. The SEC Evaluation Work Group has sort of been tasked with looking at the sufficient accuracy issue. And we're currently waiting for a NIOSH report which should be ready soon.

LaVon, I see you shaking your head, so are you going to update us on that? Either Ted or, did Ted get this up, we got one report from either Ted or Jenny that some of the past transcripts and so forth. You look blank so it must have been from Jenny or somebody sent us that.

MR. RUTHERFORD: Yes, we're actually working on a matrix that actually identifies the decisions that were made in the past SEC evaluations that will hopefully, once we go through all those decisions, the Board can look or the Work

Group can look. And we can all possibly develop some criteria for the sufficient accuracy based on what we've done in the past up to this point.

We've got a couple of the sites done as a test. It's going through our review now. And then we're going to work through the, and it would probably be a good idea, I think, to get the Work Group involved early in this looking at the matrix that we've started with to see if we're all on the same page. So that would be what we would supply to use in here.

CHAIRMAN MELIUS: And our plan would be as soon as you have that matrix ready then we'll schedule a meeting of the Work Group and start discussions on that and decide, so.

MR. RUTHERFORD: Okay.

CHAIRMAN MELIUS: And that will be?

MR. RUTHERFORD: That initial report portion of it would be ready probably next month.

CHAIRMAN MELIUS: Okay.

MR. RUTHERFORD: We're reviewing it right now.

CHAIRMAN MELIUS: Okay. I know we're targeted around the date of this meeting. Any other Work Groups have updates or questions?

MEMBER BEACH: Jim, I don't really have an update. But worker outreach was tasked with the timeliness issue. And I know that, I'm hoping that the Worker Outreach Work Group will meet again late summer, maybe August time frame. We're waiting for other work which I'll report on later. And we will ask NIOSH to kind of get started on that, so.

CHAIRMAN MELIUS: One thing you might want to consider, because I know you have been waiting for quite some time on the other issue, is maybe doing a quick Work Group conference call. That's what we did on the SEC evaluation and just, I think it helped at least to get coordinated.

Even in a one hour call especially if things drag on and so forth. So we can coordinate and plan what --

MEMBER BEACH: I will check with Stu or Jim on that. I believe NIOSH, it's going to be in their court to start with.

CHAIRMAN MELIUS: Yes, but I mean we had like a 45 minute if that conference call and it did help to get everybody coordinated on that. It's a little different than our, how we usually, usually we're dealing with waiting for reports to review and we've got the process. This process is a little bit different. Anybody else have reports? Yes, Paul.

MEMBER ZIEMER: Can you remind us or maybe NIOSH remind us, what issues are actually being addressed and whose doing it? I know in general we like to say all the issues raised in the report are being addressed. But there, even there is a priority on what's sort of in the immediate future.

And while we're pondering that, is it safe to assume that the new Board Members have been provided with the 10-year review?

CHAIRMAN MELIUS: I think they've

been provided, I assume they were provided with the 10-year review.

(Simultaneous speaking.)

MEMBER ZIEMER: No, this is a 10-year review of the NIOSH program which was done, yes, after ten years.

MR. KATZ: I will take care of that after this meeting.

CHAIRMAN MELIUS: Okay. The new password is when was the 10-year review. No wonder your keys don't work. By the way I was sitting here, I got an email --

MEMBER ZIEMER: I would have known the answer but.

CHAIRMAN MELIUS: I got an email from Dell offering to sell me a computer. They must have known. I thought I saw it, had it on my computer.

MEMBER ZIEMER: Maybe Stu can, I know a lot of these are in NIOSH's lap.

MR. HINNEFELD: Yes, I have a few notes that I think can point to some of these. If you recall from the 10-year review there were a series of recommendations just concerning dose

reconstruction, which was largely about dose reconstruction quality and then also about consideration of the continuing to use overestimating efficiency approach.

That is being worked with the Dose Reconstruction Subcommittee. There are some, some of the quality, dose reconstruction quality considerations are being discussed on that Subcommittee. And we have gathered some information on the cost impact of doing away with efficiency measures. And it is quite substantial.

Now our analysis actually was doing away with efficiency measures altogether when really all we were supposed to be looking at was do away with overestimates. Because no one really complains about an underestimate because someone always, you know, it's a compensable claim.

So it might be the cost impact may not be quite as severe as what our analysis shows, but it is a really significant impact in terms of cost and schedule. Meaning, you know, we only have

so much money to spend per year and so what it means is things are going to slow down if it costs more to do per dose reconstruction. So it was a fairly significant thing there. And there are some other quality tasks --

MEMBER GRIFFON: Stu, I think at the last Subcommittee meeting, I think you missed that one.

MR. HINNEFELD: I missed that, I was trying to travel.

MEMBER GRIFFON: But we just asked for that because we discussed that. We asked for them to bring a report back on it. A written, you know, sort of a write up that we could look at and discuss a little more in depth.

MR. HINNEFELD: Yes. The quality of service, at least one of those I think is what Josie was talking about. It was referring to Worker Outreach Work Group, having to do with the quality of our communication vehicles. And then there's also a part of this is also how well do we respond to claimant comments.

And that's a big part of what a

Work Group, Worker Outreach Work Group is addressing. And that's the product that we owe them. I would think we would have that out probably within a couple or three weeks from the end of this meeting to that Work Group the product that has to do with that.

It was a pilot view of comments that were made related to Rocky Flats Site. And we hope to have that out before too long to the Work Group.

There was a timeliness issue about higher priority to return claims as opposed to new claims since these pieces have already been in the system. I think that was referred to a Dose Reconstruction Subcommittee. We do, in our contract with our subcontractor, they do have an additional shorter incentive period for reworked claims.

You know, we put incentive criteria in our contracts. And there is a specific one for reworked claims and it's a shorter duration than their incentive for the new claims.

And let's see in the SEC world

there's a recommendation to be able to speak separately about issues that are policy issues as opposed to science issues. Because it's kind of when we make these decisions it's sort of a combination of both. And sometimes it's not clear whether we feel like we have a science question or policy question.

LaVon, I don't know if you're quite up to date with that. I know some of our, either are we presenting this month where we have the separate policy document or will it be next month, next meeting?

MR. RUTHERFORD: Next meeting. Yes, actually what we're doing now is we actual do a, through the process of our evaluations we on a biweekly schedule, we provide updates through management of the chain of potential decision points that are made throughout the process of the evaluation. And ultimately that rolls into a final report. And then those will, portions of it will be seen within the Evaluation Report.

MR. HINNEFELD: And then Dr.

Melius mentioned the sufficient accuracy question, which we're also working on with that Work Group. In the quality of science, not these, weren't all, these were generally not referred to the Science Issues Work Group.

A couple were referred to the Procedures Subcommittee. One having to do with procedures, modification procedures database to encompass, you know, findings from all sources on these various documents. We're trying to figure out how exactly to address that. I kind of like to, we've done a lot of work with the procedures, what we call the procedures database or the procedures review application, Board review application.

I hate to get, you know, I kind of like it, it's being formed up the way that we want it to work there. I'm thinking we may look more here at a sort of a meta application that would draw the findings from various places so that you could see all the findings to a particular document, that you'd be pulling them out of separate,

different applications rather than to throw them all into one big application, so.

So far our work there has been really on getting the procedures review application working the way the Procedures Subcommittee wants it to work. And then there's some indirect exposure assessment work that I believe is still down the stream a little ways, right? I can't see too much else here. There's the EPA survey data.

CHAIRMAN MELIUS: I found your presentation from the, finally, I knew I'd seen it someplace. You've hit most of it so I think there's a peer review sort of issue that I think is more of an internal issue you're working on.

MR. HINNEFELD: Yes.

CHAIRMAN MELIUS: That assessment of indirect exposure methods focusing on SRS, I think?

MR. HINNEFELD: Yes, there's a lot of Savannah River work going on for the Savannah River SEC and so some of that may be useful for this process, some of it not.

DR. NETON: Exactly. We targeted

Savannah River when this finding came about because it is a fairly robust database with all kinds of work, job titles and job histories that sort of thing. And we're going down that path looking at individual job titles and seeing if there are, if there's a need to stratify within the coworker models as they are.

There's also some concurrent efforts going on though for SEC evaluation that Tim Taulbee's working on looking at stratification between traits, construction workers and the general site workers. And there's some really good stuff going on there in coworker models for those two strata looking at the exotic radionuclides curium, neptunium and I think maybe americium.

And there's some really new statistical techniques that have been developed to be able to analyze the different strata to see if they really are different from each other and they would need to be separated. Those efforts are ongoing and I think at this point we're

looking at a, maybe a completion date at the end of August sometime. So maybe early fall we should be able to have some sort of report available.

CHAIRMAN MELIUS: I've also got a characterized degree of claimant favorability, evaluate utility of EPA surrogate data protocol.

MR. HINNEFELD: That's kind of been done, right?

DR. NETON: That one we actually recruited another division in NIOSH, DSHEFS Division of Surveillance, Hazard Evaluations and Field Studies. And selected an industrial hygienist to look at it, sort of a fresh pair of eyes from a different discipline to see if the EPA documents would be formative as to how we would look at that issue.

That's done. It should be available for posting on our website soon. That analysis has been done. The short of it is that there isn't much in there that is different than what we're already doing, to be honest with you. There were some

recommendations for maybe future investigations. But it looks like we've kind of got our bases covered in that area.

CHAIRMAN MELIUS: I think that pretty much covers it. Maybe what we'll do is put together a sort of another, I'll work with Stu and LaVon or Jim whoever's involved. We can put together a little document or something that will sort of reference these, each of these items and then which Work Group is involved and sort of keep it updated.

DR. NETON: All right.

CHAIRMAN MELIUS: Yes, I think now I'm afraid we will loose track of these.

MEMBER BEACH: Jim, I found on some of the notes that I had kept the action list, action items list.

CHAIRMAN MELIUS: Yes.

MEMBER BEACH: Which pretty much outlines each category very well.

CHAIRMAN MELIUS: Yes, I have that also not here. I have a handwritten --

OPERATOR: This is the operator. The participants are having a hard time

hearing you. Is it possible to speak closer to your speakerphone?

CHAIRMAN MELIUS: Okay.

OPERATOR: Okay. I'll reconnect you.

CHAIRMAN MELIUS: We are running ahead of schedule. And let me go through a couple of reminders as we get ready to get through this meeting. One is that we do have comments, public comments from the last two meetings I believe, that Ted sent out to everybody on the Board and we need to sort of go through that and so forth.

Some of you may be responsible for that, not many I remember when I went through it. It mostly seemed to be NIOSH staff. But we need to go through and make sure of that. So that we will plan to do either tomorrow or Thursday during one of our work sessions. But if people could go through it ahead of time it would be helpful, particularly if you have questions.

And we have sort of a spreadsheet that lays it out in simple form and then there's the attached transcripts that have

the full discussion of that particular item if you want to check that part out. We also remind everybody that we have updates from both NIOSH and from SC&A on where they are in terms of current work and due dates or expected delivery dates for various reports and so forth. So when we go through the Work Group reports, I think that would be the time to discuss each of those.

So again, remind everybody to check your sites, your Work Group sites for both of those. And then also if there are differences in the way that's reported, let's bring those up also in terms of what you know. Because some of those may not be completely up to date.

The other thing I'd like to get started on while everybody's here and early on especially since we have people that, Board Members that aren't here, is the schedule, upcoming schedules and scheduling future meetings because I'd like to try to get done. So Ted?

MR. KATZ: You want to do that now?

CHAIRMAN MELIUS: Yes. At least let's get the potential dates out there and see where people stand. And then we can --

MR. KATZ: So why don't I start by reminding you of what we have scheduled ahead of us. That might be useful to some of you. So presently we're scheduled to have a Board teleconference, let's see, on August 15th. And then a meeting in Denver, September 18th through 20th. And then the following Board teleconference is November 5th.

MEMBER ANDERSON: September, what was the date?

MR. KATZ: I'm sorry, September 18 through 20 in Denver. And then again, November 5th is the following teleconference. And then the next Board meeting December 10th through 12th and that we hope to do in Tennessee. Either Oak Ridge or there had been talk at times about Nashville. But I mean Oak Ridge is where the sites are.

MEMBER LOCKEY: When was the first teleconference?

MR. KATZ: The first teleconference, August 15th.

MEMBER POSTON: The December dates.

MR. KATZ: December dates are December 10th through 12th.

CHAIRMAN MELIUS: Let's talk about location there while we're, because we were a little uncertain on where we should hold that meeting. Idaho was out. And as is Alaska and a few other places, but are there any other sites people think that we'd be ready for review or closure or where would be, because we really don't have much going on. We have lots of activity in Tennessee, but no outstanding SECs.

MR. KATZ: We have an SEC that we'll be receiving for Oak Ridge late summer or early fall. Is that right Bomber?

MR. RUTHERFORD: Yes, we're looking at late summer. And we plan to present that at the September Board meeting. And that's for Oak Ridge National Lab.

CHAIRMAN MELIUS: Big one, small one?

MR. RUTHERFORD: It's a Class right now. It's the early years up through I think 42 to 53, 54 time period. And so that's about it.

MEMBER CLAWSON: We also have Clarksville that's coming up today.

CHAIRMAN MELIUS: Other sites you're, I mean I don't have any problems with Tennessee. I'm just trying to think, it wasn't a sort of wasn't a compelling reason other than we hadn't been there for a while and --

MEMBER GRIFFON: What about Mound?

MEMBER BEACH: We should be finished up with Mound in September is what I'm hoping for. The other question on the dates in December is why we decided to go with the 10th, 11th and 12th instead of the 11th, 12th and 13th?

CHAIRMAN MELIUS: Somebody, more than one person I think had a problem. It wasn't me.

MEMBER BEACH: Is that what it is?

CHAIRMAN MELIUS: On the, yes. I think we went back and forth on that so, sorry.

MEMBER KOTELCHUCK: The teleconferences are, there's a standard time?

MR. KATZ: Yes, 11:00 a.m.

CHAIRMAN MELIUS: So our West Coast Members don't have to get up too early.

MR. KATZ: November 5th, call date.

MR. RUTHERFORD: Just to mention that we will be ready for an addendum for SRS. And it will be right after the September Board meeting. So it would be presented in the December Board meeting. I'm just letting you know and that's the post-72, I believe thorium determination. Yes, and I think we have some, also some other items on that, that Mark may know that will be ready by then as well.

MEMBER KOTELCHUCK: The September 18th date. Is that a problem, that may be a problem for some of us who celebrate Rosh

Hashanah. That happens to be the first day.

CHAIRMAN MELIUS: It didn't come up when we scheduled that was a problem. It's come up since and so we've been --

MEMBER KOTELCHUCK: Yes, it is the second day which fewer people celebrate. You can celebrate on either day.

CHAIRMAN MELIUS: What about going back to SRS? I'm trying to remember when we've been, since we haven't --

MEMBER GRIFFON: Yes, I just don't know if we're getting the addendum after the September, or at the September meeting, is that the, that's what he just said, right?

CHAIRMAN MELIUS: Yes, that's what he said just after the September meeting.

MEMBER GRIFFON: Yes, I mean I'm not sure, I'm sure the Work Group will meet between then and December. I'm not sure if we'll be in a position to --

CHAIRMAN MELIUS: So the March meeting might be --

MEMBER GRIFFON: It might be more

realistic, yes.

CHAIRMAN MELIUS: Okay. I'm just trying to --

MEMBER GRIFFON: I mean I'd like to say, yes. But I mean --

CHAIRMAN MELIUS: So let's stick with Tennessee I guess. Yes, unless, okay. Then you have new dates.

MR. KATZ: So that's scheduled already. Okay so let's go to new dates now. So and I'm just giving you weeks where the approximate, you know, the date range is approximately right. So the week of January 28th or February 4th would make sense following December Board, I mean this is a teleconference. How do those weeks look for Members?

MEMBER ROESSLER: The last week in January is the health physics mid-year.

MEMBER MUNN: Let's just do February, the week of the 4th.

CHAIRMAN MELIUS: February 5th.

MR. KATZ: Does that work for everyone?

MEMBER LOCKEY: What day is that?

CHAIRMAN MELIUS: Tuesday.

MR. KATZ: Does that work for you, Jim? Is that all right?

MEMBER LOCKEY: That's my clinic day.

MR. KATZ: That's your clinic day.

CHAIRMAN MELIUS: Thursday the, I can't do the 6th. But what about the 7th?

MR. KATZ: February 7th?

CHAIRMAN MELIUS: Thursday.

MR. KATZ: Does that work for everyone?

CHAIRMAN MELIUS: Bill, do we still have you on the line, Field?

MEMBER FIELD: Yes, that works fine for me, Ted.

MR. KATZ: Okay, great. February 7th. So 2/7 teleconference.

MEMBER ANDERSON: What time?

MR. KATZ: 11 o'clock Eastern Time. Okay then about the date range for the next face to face meeting the week of March 11th, 18th, 25th in that ball park.

MEMBER MUNN: Let's stay away

from Easter.

MR. KATZ: I don't know when Easter is.

MEMBER MUNN: It's the 31st.

MR. KATZ: When is Easter?

MEMBER MUNN: March 31st.

MR. KATZ: Okay. So we're all right.

MEMBER BEACH: So the week of the 11th or the 18th.

CHAIRMAN MELIUS: Does anybody have conflicts with either of those weeks? Because what I'd like to do is email out to the Board Members that are absent and see if they're, if we hear back and we'll try to pin it down before we close out this meeting. But at least give them some chance for input.

MR. KATZ: For everyone at the table, the weeks of March 11th and the week of March 18th are both okay? Is that correct?

MEMBER BEACH: Preferably having travel on the beginning of the week.

MR. KATZ: Yes, I'm always trying

to avoid the weekends for travel, absolutely.

MEMBER POSTON: That's spring break for a lot of the universities.

MR. KATZ: Which week is?

MEMBER POSTON: March 11th.

MR. KATZ: So does that mean that's bad or good?

MEMBER POSTON: Well that depends on if you're going on vacation or not.

MEMBER BEACH: If you're a professor it's good because you're available, right?

MEMBER POSTON: Yes, I should be available. But it's, some people like to take vacation.

MR. KATZ: That's not allowed. No, so I'll follow up with the absent Board Members then. Bill, do those work for you, those two weeks?

MEMBER FIELD: Yes, either one would be fine. The second one is better, but the first would be fine as well.

MR. KATZ: Okay. Thank you.

MEMBER GRIFFON: If you're

thinking of a location on that one you might want Savannah River, I don't know.

MR. KATZ: Let's pencil that in. Savannah River Site for that.

CHAIRMAN MELIUS: Then we can all go down to Fort Lauderdale with the college students.

MEMBER BEACH: Not during spring break, please.

MEMBER ZIEMER: Are we talking Augusta then?

MR. KATZ: Yes, that would be Augusta.

CHAIRMAN MELIUS: Actually when I flew out to the Oakland meeting I was with a bunch of disappointed Daytona 500 fans that had been rained out and they couldn't get flights out the next day so they all had to go and miss the race. And the internet kept going down on the plane and so, including right at the end of the race. So they were all going crazy on the flight.

MEMBER MUNN: Poor things and on top of that they graduate and don't have jobs.

CHAIRMAN MELIUS: Well these were former students, for the most part. Had to get back to work. And just one more housekeeping, we'll start doing, we're pretty well tightly scheduled for the various site updates the rest of today and tomorrow because we'll have petitioners on the line maybe not commenting. So we'll want to try to start those at those times.

I know Mark has got to leave tomorrow morning or tonight. And so we'll try to catch up with you in between on your Work Groups and so forth and start going through Work Group reports and so forth. And why don't we take a break and reconvene at 10:45?

(Whereupon, the above-entitled matter went off the record at 10:06 a.m. and resumed at 10:47 a.m.)

CHAIRMAN MELIUS: If everyone will get seated, we'll get started.

MR. KATZ: While we're getting set here, let me just note for the folks on the telephone line, we have an international line hooked in here for one of the Board

Members and I believe during the last session you heard a message saying that the phone service was about to be discontinued, press *, one to continue the call.

That message was for that international line, not for all of you on this domestic line. So when you hear it again, just ignore it. It won't cut you off.

CHAIRMAN MELIUS: Okay, do we need to do any roll call?

MR. KATZ: Yes. So yes, and we're missing a couple of Board Members from the room as well. Let me just check on the phone line and see which Board Members we have.

MEMBER FIELD: This is Bill Field here.

MR. KATZ: Great. Any other Board Members on the line? Okay.

CHAIRMAN MELIUS: Okay, we'll start the, first item for this session is the Winchester Engineering and Analytical Center, SEC petition and that is an 83.14 and LaVon Rutherford will be presenting.

MR. RUTHERFORD: Thank you, Dr. Melius. Oh, wow, that kind of --

CHAIRMAN MELIUS: Well that'll wake us up, yes. May not have coffee, but we've got.

MR. RUTHERFORD: Okay, for those of you who don't know me, I'm LaVon Rutherford, I'm the Special Exposure Cohort Health Physics team Leader for DCAS. And I'm going to discuss the Winchester Engineering and Analytical center Special Exposure Cohort Petition Evaluation Report. And that's a tongue twister.

Is it going to let me move, here? Just the arrow keys. Okay. Let me see, now it's working with the arrows. Okay, yes, a little bit about this.

We actually determined in August of '08 that dose reconstruction was not feasible for the Winchester site, however at that time we did not have a presumptive cancer claim. We had one claimant, it was a non-presumptive cancer and we did not want to ask that non-presumptive cancer person to be the petitioner for something that they

ultimately would not be compensated for.

So we set this one aside and then we did receive a claim in November of 2011 with a presumptive cancer. We did a little due diligence work to make sure that we had, we were pretty comfortable with everything we'd done at that point, but we did do some additional due diligence.

And then in March 5 of 2012 we notified that claimant that we could not reconstruct dose at the facility and that we also provided them with Form A for being a petitioner.

On March 13 we received that petition and then on April 27, 2012 we issued our Evaluation Report.

A little bit about Winchester, it's also known as U.S. Public Health Service Northeast Radiological Laboratory and some other aliases, Northeastern Radiological Health Laboratory. It was known as National Lead Company because National Lead operated there for a period of time.

And then the period of concern

that we are dealing mostly was known as the AEC Raw Materials Development Laboratory. It's located in Winchester, Massachusetts, it was a Department of Energy site from 1951 through 1961 and then ownership was turned over.

The last operator of the facility was the FDA, Food and Drug Administration. Their main function was participating in the development of methods for extraction of uranium and thorium from ore and those are low-grade ores and prepared metal-grade uranium tetrafluoride.

There's a slight typo there, I don't know what I was doing at the time. I put tetrachloride and it should be tetrafluoride. I noticed it this morning when I was reviewing it and I was saying tetrafluoride and I was reading tetrachloride and I said, that's not right.

The facility was located on 5.8 acres approximately 15 miles from Boston. Main facility was a single-floor masonry building approximately 31,000 square feet. Had 30 rooms with labs, offices, boiler room

and work areas, shops, et cetera.

Also on the site, a solvent storage building and a small pilot plant, house corrugated metal building. Workforce was approximately 70 to 100 workers. We got those numbers from an AEC summary report during the period and we also interviewed a senior chemist from the facility who gave us pretty much the exact same numbers.

There's the floor plan. As you can see, if you look at where the entrance is, most of the rooms from close to the entrance are administrative in nature and then as you move farther into the facility you get a lot of the more production and the laboratory work.

You can see like, 18 in the upper right-hand corners, the high U laboratory. Over at 24 and 25 you've got the pilot plant, you've got solvent extraction.

The area is kind of, there was radiological work that really was conducted past the administrative buildings through all that area.

A little background on where we

looked for information. We looked in our Technical Information Bulletins. We did interview a former Winchester employee, as I mentioned. We only have a few claimants and finding individuals to interview was tough, but we did find one individual who was a senior chemist that worked during the period and really gave us a really good, informative interview.

We looked at existing claimant files, documentation provided by the petitioner, Site Research Database and data captures. There are standard data captures through Legacy Management, Opennet, NRC, NARA Atlanta and various DOE locations.

We also contacted former operators or companies that operated the facility during the time period to see if we could get some information from them. National Lead Company, American Cyanamid, Wyeth General Insurance and the FDA.

They, we did, we got two documents out of all the contacts that we made with them. We had, as of May 22 we had three claims for this facility. As I

mentioned, in '08 we had one claim and it was not presumptive cancer.

In the last eight months we've received two claims, two additional claims. So we have a total of three claims. None of those claims had internal or external dosimetry.

Operations at Winchester, this was a laboratory. They worked in conjunction with the Grand Junction operations pilot plant during the period. They did a lot of research work with focusing on extraction of uranium and thorium from low-grade ores and they worked back and forth with information they learned from the laboratory providing it to the larger-scale pilot plant at Grand Junction.

So there's a lot of correspondence back and it actually makes some of our review difficult because you see these pilot plant documents and you don't know if it's pilot plant Grand Junction or pilot plant in Winchester. So we've had a challenge there.

In 1957, Winchester extended its

research to developing methods for reducing radiological hazards from mill operations. In 1959, the facility transitioned from the development of production methods to testing uranium waste environmental analysis methods and performing laboratory testing and analysis.

Internal sources, they dealt with uranium and uranium progeny from ore and raffinates. Thorium and thorium progeny from ore. Those were, as I mentioned, lower-grade ores, thorium ore and uranium ore.

External sources, photon/beta exposures from uranium thorium ores and raffinates and neutrons were not a significant source of the external exposure.

Internal monitoring data. Approximately 50 uranium samples for the period of '52 to '55 we had a handful of radon breath analyses. I say a handful because it's not clear. Four of them we know, four of the analyses were definitely from the Winchester facility. Two of them we're not sure if they were from Winchester

or Grand Junction. But again, very few samples that we had.

Air sample data, we had seven breathing zone samples from 1953, 25 uranium dust samples from 1955 and eight air samples for radon in 1955. So if you look at the operating period, roughly '52 to '61, '52 to '59 is the main operating period.

We had spot data through the period of uranium urinalysis data, some radon breath samples, which would be indicative of radium uptake in 1955 and we had some air sample data spread out, '53, '55.

And no external monitoring data for the covered period. My only thought would be that they were thinking that since they were dealing mainly with smaller quantities of ores they weren't getting a significant external dose, however we can't verify that and we have no dose rate surveys or no personal monitoring data at all.

Limited process information about the extraction. We have a little bit about the extraction methods that they were

attempting in the early years, the '52/'53. Nothing beyond that. No detail as in quantities used for the source term.

Because again, they did have a pilot plant in the back of the facility and they were testing some of the equipment that ultimately was used at Grand Junction for the process.

Again, as I said, minimal information on quantities of thorium and uranium on site. We know that various mills sent samples to the site to run them through the tests and the various tests they were running.

I believe most of these mills were domestic mills or which included, so lower-grade ores, as I mentioned. Reports do indicate a wide variety of forms of uranium-bearing materials were used on research and pilot plant projects on site.

Ore, metal pitchblende and uranium oxide. We also know that thorium and thorium ore. Very little information is available to describe the pilot process, testing or laboratory work conducted at

Winchester.

Based on the scattered data we have and no thorium monitoring data, the limited radon data that we have, we had some radon air data in one year. And based on this limited information that we have and no external monitoring data, we found that the information is inadequate to complete dose reconstruction with sufficient accuracy for the Class from January 1, 1952 through December 31, 1961.

I put this on a slide because I mainly, that, because of the exposure potential. I said the findings from this SEC evaluation are consistent with SEC determinations for facilities with similar radiological exposures.

The difference with these facilities, Mallinckrodt, Harshaw and Linde that you see, is these are production facilities.

This is a laboratory facility, but the exposures that you would see at those sites are the same types of site of exposures that you would see in dealing with

the thorium ore, the uranium ore and such.

Our feasibility, again, summary, internal dose reconstruction is not feasible. External dose reconstruction is not feasible. We will use any personal monitoring data that does come up for an individual for non-presumptive claims. And we can do occupational medical X-rays.

Evidence reviewed indicates there was a potential for chronic exposure to these workers of radiation exposures, of intakes of radionuclides and direct exposure from radioactive materials.

Consequently, we feel that health may have been endangered. And here's our proposed Class, it's all employees. I may shrink it a little bit, so, all employees of the Department of Energy who worked at the Winchester facility from January 1, 1952 through December 31, 1961.

And then the standard language beyond that. And again, our final recommendation is dose reconstruction is not feasible for the period of January 1, '52 through December 31, 1961. And that's it.

Questions?

CHAIRMAN MELIUS: Questions? Josie?

MEMBER BEACH: LaVon, I just have a couple of quick questions. The lab access, you didn't mention that. Was there any, I see the hallways run straight through the whole building.

MR. RUTHERFORD: Yes. In fact, I should have actually had a slide or discussed that a little further. We have no indication there were any access controls between, if you look, actually, and I'll see if I can pull it back up.

MEMBER BEACH: It looked like 18 and 11, those two rooms were, maybe 25?

MR. RUTHERFORD: Yes, if you look up front, you can see the, like 29 is the Engineering Office, 30, and some of these area --

MEMBER BEACH: Thirty is the lunchroom?

MR. RUTHERFORD: Yes, in some of these areas up front, the workers that, I mean, the individuals that worked in those

areas still had to go to the back. They had to go back into those areas. And we have no indication, in fact, in our discussion with the senior chemist that, there was no control stopping anyone from moving from one area to another at the time period.

MEMBER BEACH: Okay and then I know you're covering all employees. Did the 70 to 100 individuals, did that include all the office workers or just the lab personnel or were --

MR. RUTHERFORD: That was all personnel.

MEMBER BEACH: Thank you.

CHAIRMAN MELIUS: Wanda?

MEMBER MUNN: Just a matter of curiosity. How significant were the, was the contamination that you found in the air samples?

MR. RUTHERFORD: Well, you know, the, we did, the radon breath analysis were about, the four individuals that we had samples, the highest one was about 50 percent of the MPC for that time period. So now I don't, you know, like I said, there

was four.

And then some of the breathing zone samples were above the MPC, but there wasn't very many samples, so it's hard to really tell you.

MEMBER MUNN: Yes, I understand that they couldn't be used, but nevertheless, interesting to know what the zone was. Thank you.

CHAIRMAN MELIUS: Yes, along the same lines, and I may have missed it, were those samples, do you think they were associated with pilot plant operations or with laboratory?

MR. RUTHERFORD: These were the laboratory. The ones that, the numbers that I gave you in the slide are ones that we confirmed were Winchester facility operations, okay? And again, Winchester had their own pilot plant.

Let me see if I can pull it back up. Winchester had their own pilot plant, which is a small pilot plant compared to the bigger pilot plant in Grand Junction operations offices. And so one of the

difficulties in reviewing the data is, as I mentioned, it would say pilot plant.

And it wasn't easy to tell, and it's all associated with this, the AEC Raw Materials Division and so it was hard to tell whether it was Grand Junction's or Winchester. So the numbers, what I'm giving you here are definitely stuff from Winchester, that we see Winchester was up in, there's, on most of these reports, you'll see plant.

And it'll say Winchester, you know, and that's how we're able to identify them.

CHAIRMAN MELIUS: Yes, and I think the question, I mean, these are different. This is a different type of facility, as you pointed out, from Mallinckrodt and --

MR. RUTHERFORD: Oh, it is, you know, the only reason I put that on there was because of the exposures to the ores and the ore material and some of, you know, that type of thing and they were doing some hands-on work with the extraction and stuff

in the pilot operations.

But it was mainly, the only reason I put those down there was because of those were exposures you've seen at those facilities as well.

CHAIRMAN MELIUS: But I don't necessarily think the SEC is the analogy. It's the exposures may be the analogy. I don't think that, by itself, justifies the SEC.

MR. RUTHERFORD: Yes, my language was probably wrong for the presentation.

CHAIRMAN MELIUS: Paul?

MEMBER ZIEMER: So, LaVon, there was this main building and a few smaller ones. Was the whole facility itself somehow restricted? That is, the lab plus the other buildings?

MR. RUTHERFORD: Actually, if you, in the Evaluation Report itself, you can see a picture and the picture shows a gate around the whole facility. That's around the whole laboratory facility and the two separate structures.

There was nothing controlling,

once you got inside the gate, into, I mean, so administrative staff and everything else, once they got inside the gate, everyone moved around that facility.

We don't have any indication, let's put it this way, we have no indication that workers were prevented from accessing different areas. And our interview with the senior chemist supported that.

CHAIRMAN MELIUS: Any other questions or comments? Bill Field? I don't know if you have any questions? Apparently not. Okay, do I have a, Wanda, yes?

MEMBER MUNN: Yes, I'm ready to propose the Class.

MEMBER BEACH: And I'll second it.

CHAIRMAN MELIUS: Sorry, he was, we had two conversations, so can you repeat your motion?

MEMBER MUNN: I am ready to propose the Class as suggested by NIOSH in the Slide Presentation Number 17.

CHAIRMAN MELIUS: Okay, and we have a second from Josie?

MEMBER BEACH: I'll second it, yes.

CHAIRMAN MELIUS: Okay. Any further discussion? Okay. Go ahead.

MR. KATZ: Okay, I will call the Members that are probably absent as well just to make certain. Anderson?

MEMBER ANDERSON: Yes.

MR. KATZ: Beach?

MEMBER BEACH: Yes.

MR. KATZ: Clawson?

MEMBER CLAWSON: Yes.

MR. KATZ: Field? Bill, are you on mute? Gibson? Griffon?

MEMBER GRIFFON: Yes.

MR. KATZ: Kotelchuck?

MEMBER KOTELCHUCK: Yes.

MR. KATZ: Lemen? Lockey?

CHAIRMAN MELIUS: Lockey was voting, indicated to me he was going to vote in support of the SEC. We can confirm when he gets back.

MR. KATZ: Okay. Melius?

CHAIRMAN MELIUS: Yes.

MR. KATZ: Munn?

MEMBER MUNN: Yes.

MR. KATZ: Poston?

MEMBER POSTON: Yes.

MR. KATZ: Dr. Richardson, are you on the line? Okay, Roessler?

MEMBER ROESSLER: Yes.

MR. KATZ: Schofield?

MEMBER SCHOFIELD: Yes.

MR. KATZ: Valerio?

MEMBER VALERIO: Yes.

MR. KATZ: Ziemer?

MEMBER ZIEMER: Yes.

MR. KATZ: Let me just check again. Bill Field, are you on the line?

MEMBER FIELD: Yes, I got disconnected, sorry about that. Yes.

MR. KATZ: Yes? Okay, great. So it is unanimous among Members present and I'll have votes to collect from three Members. Motion passes.

CHAIRMAN MELIUS: Okay. Good. Now I'd like to start with the Subcommittee and Workgroup Reports and we'll start with Mark and then we'll start alphabetically as on the list that's on your, you were given

today and I think it's the usual list, so, but go ahead, Mark, with the Dose Reconstruction?

MEMBER GRIFFON: Yes, the DR Subcommittee meeting or Subcommittee met on the 6th of this month and we did make some headway, as Stu mentioned, on a couple of those items from the 10-year review. Also we, one of our primary things that we discussed was a means to accelerate the DR Issues Resolution process.

As many of you will know that we've lagged behind SC&A's progress in reviewing the cases, so we came up with a means, we hope this will accelerate the process of actually coming to resolution in the Subcommittee.

And part of it involves the SC&A and NIOSH doing some technical calls in between our Subcommittee meetings to sort of get a handle on where a certain finding stands, rather than having to go back and forth between.

Oftentimes we get an update at one Subcommittee meeting and then SC&A says,

oh, I didn't know that's what you meant, NIOSH. And they'll go back. And so it strings out for several meetings. So we're trying to make that a little more efficient by allowing some technical calls in between Subcommittee meetings.

We're also going to open those up to allow for Subcommittee Members to dial in if they're available, but we don't want them to be at a Subcommittee meeting, but just to listen in and they're also going to create a record of the discussion to bring back to the Subcommittee.

So we'll see what was said, but it should expedite our process at the Subcommittee level, allowing us to catch up on all these past findings.

The other thing we got some updates on was in response to the 10-year review, NIOSH has put in place what they're calling a blind review program, a blind QC program, I guess, I'm not sure if it has a title.

But basically they're pulling out cases and NIOSH staff is doing them in

parallel with the Oak Ridge group, ORAU and I think it's, I forget the numbers, but it's two or three per week or two or three per 50 or, I, Stu can clarify.

MR. HINNEFELD: I think we started at two a week and we weren't keeping up so we said let's try one a week for a while until we get caught up.

MEMBER GRIFFON: Right, and where that comes into the Subcommittee is that we've asked for sort of, to be able to look at that, the results of that in aggregate.

We don't want to redo each one of those cases that NIOSH is doing internally, but rather, we'd like to see what they find in aggregate and whether it has any similarities to our, especially along the lines of quality control findings that we've found in the past.

So we had a discussion on that and we're, NIOSH is setting that up so that we can link in and be able to sort of see some, not only get aggregate reports, but also be able to access it through our O: drive in between meetings.

We're also going to get a more in-depth presentation from NIOSH and ORAU at the next Subcommittee meeting on their QC/QA program. That was supposed to happen at the last meeting, there was a little miscommunication of what our expectations were, so I think we clarified that. We're going to get a further update on that.

We think that's very important because a lot of our findings have been QA-related, so we'd like to see exactly what is being done internally, the nuts and bolts part of the QA program and it might shed some light on our next summary report, which brings me to the next item, which is, the Board had asked us to consider another report to the Secretary.

We had a discussion on that at the last Subcommittee meeting and the feeling was, at this point, it probably wouldn't make a whole lot of sense to develop a report from the Subcommittee or from the Board to the Secretary because it would likely be really just a status report and a lot of the findings are very similar

to the first set of five cases that we reviewed.

So we'd rather wait and be able to say more about this QA/QC program and, you know, our findings going forward on the QA/QC issues rather than report out on something we think would be very similar to the last report.

So that's sort of where we came as a Subcommittee, you know, if the Board has an other opinion there, we certainly would reconsider. Let's see, the, oh, we also began a discussion and I've offered that, at the next meeting I'll bring forward the specific documents that are about 10, 11 years old, whatever, to reexamine the selection and the review of methodology documents.

They've been in place since the very beginning and I think we've mentioned it a few times on the Board level that it might be a good time to reexamine those, so we're going to bring that item up to the next Subcommittee meeting.

And I've offered to, for all of

our review, to find those original documents and distribute them, it would be especially beneficial to the new Members, but also to those of us who haven't looked at them in a while, I think it would be useful as well.

Along those lines, one of my concerns is that in our review of several of these, and this is my opinion, not necessarily the Subcommittee's, but we have the DR Subcommittee, we have the Procedures Subcommittee and we have Site Profile reviews going on and one concern, and this is why I want to reexamine our methodology, is that, one concern of mine is that we, are we letting something fall through the gaps in our review process?

Especially when you look back at the original definition of what we're supposed to do, which is advise the President on the scientific validity and quality of dose estimation and reconstruction efforts.

I think it seems like, of late we've had a lot of focus on the quality and sometimes I think the, I'm afraid that the

scientific-validity question gets pushed around. For example, in our review of the individual cases, we often say, we look at the workbook and make sure that they applied the procedure correctly.

In the procedures review they look at the procedure in detail and see that it makes sense, but oftentimes if it's a site coworker model, we defer that to the Site Profile review. And if the Site Profile reviews are where they're at in a lot of our cases, I think they're not completed, you know?

So I just worry about, are we pushing things around and not getting to that answer of scientific validity as well as we need to? So that's something I want to bring up as we reexamine our methodology and maybe something for others to think of with the, how the committees work together.

And I think that's it. Otherwise we continued our regular work on the backlog of cases that we're discussing. I think that's it, unless other Members had other --

CHAIRMAN MELIUS: One quick

update. Where are we with our blind reviews?

MEMBER GRIFFON: Yes, that's a good -- as I was writing my notes, I, and I don't know, John or Stu, if you can help me out there? I forgot where we were with those. I know that SC&A reviewed the cases and I just don't know if they ever came back to the Subcommittee.

MR. HINNEFELD: Good question. They've been reviewed and yes, I'll have to go back and refresh my memory. And I think, actually, John Stiver wasn't particularly involved in that if John Mauro was doing it.

MEMBER GRIFFON: Yes, I'll definitely add it onto our next, because we also had a question of, you know, should we do more of those?

CHAIRMAN MELIUS: So that was certainly part of the original plan and, that we cut way back on that.

MR. KATZ: Yes, just to add to that, they've been, we had a discussion at a Subcommittee meeting of those blind reviews, but I don't think we concluded the

discussion, so had sort of an opening discussion of them and we haven't proceeded to wrap that up. And we need to, that's true.

MEMBER MUNN: Well, we had a problem identifying an adequate number of cases that would be appropriate for the kind of review we wanted to do.

MR. KATZ: No, the one I'm speaking of --

MEMBER GRIFFON: No, no, no, the couple that we assigned --

MR. KATZ: -- is, SC&A has produced some reviews of --

MEMBER MUNN: Oh, the ones that they've done?

MEMBER GRIFFON: Yes, yes, yes.

MR. KATZ: Exactly, exactly.

MEMBER MUNN: Yes, but we were talking about the sparsity of claims that we had that would lend themselves to a blind review.

MEMBER GRIFFON: Oh, yes, no, that's a separate --

MEMBER MUNN: Okay, yes, separate

issue.

CHAIRMAN MELIUS: Gen and then Paul.

MEMBER ROESSLER: Mark, I'm glad to hear you say that you're doing some catch-up on some of these past findings. I'm thinking of the individual cases where I as a Board Member, and I'm not a part of your Subcommittee, I'm on the phone with SC&A where they go over the individual cases and every now and then they come up with something that, to me, sounds significant.

And granted, some of these are very old cases, but then I sort of feel like I never know what happens. Does this get presented to NIOSH and do they discuss this and do they resolve this so that this particular problem doesn't continue?

And I feel sort of, you know, I don't see any resolution as an individual Board Member.

MEMBER GRIFFON: Right, no connection back to you?

MEMBER ROESSLER: Yes, and that's what I'm looking for.

MEMBER GRIFFON: And I think that's why we, I mean, the urgency to catch up, sort of, is that we find ourselves reviewing some of the, still resolving some of the older issues and NIOSH is coming back to us saying, oh, we've changed that whole procedure since that case was done.

You know, so we'd like to catch up and be sort of, you know, looking at more current dose reconstruction cases and therefore current issues, you know? So yes.

But we're working on it, so hopefully this new, accelerated approach will get us up to speed by next meeting, right, Ted?

CHAIRMAN MELIUS: Paul.

MEMBER ZIEMER: Mark, while I can appreciate the idea that maybe a current report to the Secretary might look a lot like the previous one, I'm nonetheless concerned that there's been quite a lapse of time since we've last reported to the Secretary.

And I'm wondering if, this is sort of top of the head, if it might be

worth some sort of interim report to indicate that although the next batch, whatever it is, so many hundred, that the results appear similar, that you're going to look at this in some additional way.

I'm just concerned about the length of time. I don't know how others feel about this, but I think it's been several years since we reported to the Secretary on what is one of our main charges as a Board.

MEMBER GRIFFON: Well, the, I mean, the other option we discussed at the Subcommittee was, perhaps we can draft a report back to here and do a presentation for the entire Board and then sort of leave it up to all of us to decide, is this worthy of submitting to the Secretary, you know, so we can do sort of a status report where we're at, where we think we're going, and then we can leave it up to the Board to decide whether it's worth submitting to the Secretary.

MR. KATZ: My sense, and this is what we discussed at the Subcommittee is, I

mean, I don't think the Secretary is going to be very interested in process in general.

So I think it would be good to have, really, more substance to provide at the point we communicate with the Secretary, which is, again, was why we were sort of pushing forward on getting more cases under our belt that have been resolved so that we know the results of that work.

CHAIRMAN MELIUS: I can understand that, but I sort of agree with Paul. I think it would be, I'd like to follow up on Mark's suggestion.

I think at least the Board, the full Board needs an update. And I don't think you have to produce the report, but if, I don't know how this, I think SC&A would compile some sort of a report or tables that would at least give us some information to look at and at least have a status report of where we are.

As an internal report, the public should probably make, you know, say if we don't go to the Secretary, at least make that available in some way on the Website or

something when we're done with it and so forth so that we can have some report back on this particular activity.

Do that and, I think it's a very critical activity. I think we as a Board have, I think SEC process has sort of overwhelmed that. The -- our Subcommittee has done well, but there's resource issues at the NIOSH level and so forth.

Some of the discussions going into his meeting were well, should we put a moratorium on doing any more dose reconstructions, that, I personally had problems with that because I think it is one of our mandates and we need to continue doing it while it also would have caused some disruption with our contractor to do that.

But at the same time I'm, you know, agree with what Gen said, that we're, it'd be nice to have some more feedback.

But the other thing that strikes me in doing the individual dose reconstructions, reviews, is that so many times we're running into what are obviously

SEC, in fact, some of the cases John and I have reviewed have been already turned into SECs in the process.

And that's usually for like, key exposure, usually a key exposure for that, you know, particular individual and we're sort of reviewing, you know, we're saying, yes, the dose reconstruction was done well or there's, you know, maybe this problem or that problem.

When in actuality, the science of it, it wasn't really, it didn't meet the mandate in the Act and I think that's somewhat bothersome with this connection with what the Procedures group does and Site Profile.

MEMBER GRIFFON: I mean, if SEC cases are getting through, that shouldn't be happening, so I don't know --

CHAIRMAN MELIUS: Well, this was, the one I can remember was one where in the interim between the time the case was reviewed and so we had just had a meeting or, I can't remember the full circumstances, and there was at least one other.

There was at least two cases like that and just, you know, maybe it's luck of the draw or something, but it had happened, and there's still some value in doing some of that, because there are other exposures at these SEC sites that we continue to do dose reconstruction, so I don't necessarily have a major problem with doing that.

But you really wonder, what are we reporting on and how do we bring the overall quality involved? And I think it's just --

MEMBER GRIFFON: The only ones for the SEC sites should be non-presumptive cancers, but, you know, and then they would do partial dose reconstruction to see what they have left in there, yes.

CHAIRMAN MELIUS: One and I think two presumptive cancers I can remember going through. So but aside from that, I mean, I don't think that's a major issue as much as this whole issue of, we have Site Profile findings that are in, you know, limbo.

We have SEC evaluation, if we tried to put everything that's not resolved,

we wouldn't have any cases to review or it'd be a nightmare to try to select cases.

At the same time, I think we need to figure out how we bring that, all that information together. I think originally, I think we thought that the blind reviews would provide some of that, and that was before we had really, the whole program had been structured, before we had a Procedures Subcommittee, before, to some extent, before the Site Profile process was developed in the way it was.

MEMBER GRIFFON: Well, and yes, and my -- going way back, my initial idea, I think, was the, and I'm even forgetting my own words, but it was basically the basic and in-depth reviews.

CHAIRMAN MELIUS: We had three levels.

MEMBER GRIFFON: Yes, we had three levels.

CHAIRMAN MELIUS: If the levels were blind, right.

MEMBER GRIFFON: Right, right.

CHAIRMAN MELIUS: And we had this

big argument over, or discussion and disagreement with NIOSH over the interview process, said we were going to do blind reviews with interviews and then that was quite awhile ago, so.

MEMBER GRIFFON: And also, I think I had a disagreement with, I know I had a disagreement with John Mauro on interpreting basic and in-depth review and so anyway, I think we, it's good to reexamine that methodology.

I mean, I have no problem, the Subcommittee can definitely, I think, it sounds like I'm hearing from several people that we should report back, at least to the Board, and that's fine.

We can, most likely I think we should be able to do that by September's meeting, if not, the following teleconference or something like that.

CHAIRMAN MELIUS: Well, yes, I think --

MEMBER GRIFFON: I'll work with SC&A and get that for you.

CHAIRMAN MELIUS: The other

thing, I think, to think about, would be how do we, is there something that we should, as a Board, have SC&A be doing? And I think the Dose Reconstruction Subcommittee would be who would be actually charging them and monitoring this, but at least look at some of the dose reconstruction reviews and/or potential reviews.

And figure out how we, what are some of the options for pulling together the what the Procedure Subcommittee has done, what the Site Profile Reviews have shown, maybe look at some of the past reviews we've done and see how they might have been impacted by changes that have come about because of the, well, three things.

NIOSH updates, the Procedures Subcommittee reviews and the Site Profile reviews and the SEC process and I think that has to be done on some sort of a selective basis because it's individuals.

But it might be informative.

MEMBER GRIFFON: Because I think for me, on the Subcommittee, the cleanest cases we have are what I've defined as these

mini Site Profile reviews, which is basically that these are the AWEs that have, you know, NIOSH hasn't, they're too small to basically do a full Site Profile, so they might have a Site Matrix or something like that.

There's not many claims, so we usually just do one of them and since we're only doing one, we basically say, well just review the whole methodology for that site. It's oftentimes just a model anyway; they don't have individual dose data, so we asked SC&A to review it like a Site Profile, review the whole site, and then we have that whole discussion on DR Subcommittee.

That keeps it all, you know, but on these other cases, other instances like the bigger sites, like you said, we have several pieces happening at one time. So I agree, we need to figure that out.

CHAIRMAN MELIUS: Yes, and I think that if the DR Subcommittee could, if you think of sort of pulling some if this together between now and our December meeting, some of it we need, should try to

do meetings in between, but sort of on that schedule, because I think we, you know, so NIOSH has done its 10-year Review, I think we should do our 10-year Review of our process here in the same way and figure out how we can do this better and what else we should be doing. Josie?

MEMBER BEACH: Yes, along the same line, I know Henry and I, when we were doing our review, one of the key issues, if Henry remembers, is the Site Profile Reviews, because they were so far behind and those would have made a difference in a couple of our cases.

CHAIRMAN MELIUS: Yes, no, I'm sure it wouldn't, it gets very complicated when you look at the individual, all the things that go into an individual dose reconstruction that are involved and the ongoing updating that NIOSH is doing at the same time, so it's not a static process by any means to do that.

Any other comments or questions on that? Bill Field, do you have any comments you want to make?

MEMBER FIELD: No, I'd just share some of the same concerns that Gen had and I think that was reflected in her comments.

CHAIRMAN MELIUS: Thanks. Okay. Now that we've got something from -- a few things to do.

MEMBER GRIFFON: Thank you.

CHAIRMAN MELIUS: Savannah River.

MEMBER GRIFFON: Savannah River, huh?

CHAIRMAN MELIUS: Yes, you're on still.

MEMBER GRIFFON: I'm back on? I thought we were going alphabetical, now. Alphabetical after me?

CHAIRMAN MELIUS: Do you want to break for a while?

MEMBER GRIFFON: No, these are, unfortunately these are rather quick. Savannah River, the, as we heard earlier from LaVon, NIOSH is planning to have an addendum on the thorium issues, the thorium exposure, the thorium dose reconstruction approach, I believe from 1972 forward. I think that's the date.

And that addendum is going to be presented to the Board in the September meeting.

MR. RUTHERFORD: Actually, it would be, it's going to be completed in October and would be presented at the December meeting.

MEMBER GRIFFON: Oh, I'm sorry, I, okay, so completed in October, I thought you said completed in August. Anyway, completed in October and presented in the December meeting. And likewise, some of the other critical issues, one of the primary ones is the coworkers on these other, what we're calling exotic nuclides, neptunium, curium, I think are, I can't remember the list.

But NIOSH is working on coworker models on that, I believe, and Jim Neton mentioned that a little earlier. But I think we're looking at a similar timeline for that, October-ish, so right now the Work Group is pretty much idle until we, you know, get some of this information back from NIOSH. There really isn't a need to meet

until we have more of that information.

CHAIRMAN MELIUS: Okay, any questions on that? We also had a letter, at least, was copied to us, I can't remember if it was directed to the Board or to NIOSH from the petitioner. Got it here.

MEMBER BEACH: I think that was to the Board.

CHAIRMAN MELIUS: Was it to the Board? That's what I thought.

MEMBER BEACH: It was. It was to you.

CHAIRMAN MELIUS: Yes.

MR. KATZ: It was two pages, imaged, right?

MEMBER BEACH: Yes.

MR. KATZ: Yes, they were JPEG files.

CHAIRMAN MELIUS: Mark, do you recall that?

MEMBER GRIFFON: I recall it, yes, I mean, if you want to summarize what the --

CHAIRMAN MELIUS: I will, I've got it here.

MEMBER GRIFFON: -- petitioner said, that would be helpful. I mean, I think it was basically concerns about the timeliness of --

CHAIRMAN MELIUS: Yes.

MEMBER GRIFFON: Yes, yes, and, you know, yes, we share those concerns.

CHAIRMAN MELIUS: Yes, it basically is timeliness, asks about a schedule, which we at least now have a schedule on this. And I think the basic, the second page, I think there are three questions here.

Were there periods after September 30, 1972 when workers at SRS could have been exposed to thorium or other exotic radionuclides?

MEMBER GRIFFON: And the answer is yes.

CHAIRMAN MELIUS: The answer's yes, yes. Have methods been developed for reconstructing doses for those exposures? I think the answer is --

MEMBER GRIFFON: And that's under development.

CHAIRMAN MELIUS: Under development and it will be reviewed.

MEMBER GRIFFON: Yes, yes, right.

CHAIRMAN MELIUS: And then I think, if methods were developed, can there be -- are there ways of identifying the workers and until methods are, we can't --

MEMBER GRIFFON: Right, place the mill workers, yes.

CHAIRMAN MELIUS: -- we can't really say that, okay.

MEMBER GRIFFON: Yes, and those are, I think those are the primary issues we have remaining. I'm going by memory, but we may have a few other issues, but I think we've, Arjun, do you have a --

DR. MAKHIJANI: There are a few other issues, like tritides. I see they updated the Matrix after the Board decision to go up to '72 and you have the updated Matrix. So I think the ones that you mentioned cover sort of the most difficult ones, but there are some other issues.

MEMBER GRIFFON: Yes, I was going to say, I think we, as a Work Group we tried

to prioritize for NIOSH which ones we thought were, you know, we would like to get done earlier.

So not necessarily thinking that October was early but, you know, we tried to, in some way, prioritize. I mean, I don't think neutron, I'm trying to think if neutrons was a remaining issue or if it was kind of, I think we were satisfied with --

DR. MAKHIJANI: No, I think since neutrons really were an issue up to 1971, after that you had the TLD, so I don't believe neutrons is a remaining issue.

But I can, let me check the Matrix and get back to you in a few minutes if that's all right, or in a later work session.

CHAIRMAN MELIUS: Let me just, and LaVon or somebody can update or Tim, according to the update we got from NIOSH, americium coworker model, July due date, delivery date. Neptunium coworker model, August due date. Mixed fission products, November. Delivery date the end of November, was that.

Tritides, August due date, delivery date. Exotic radionuclides, looks like it's -- I don't know if this is a misprint, it says January 6, 2012.

MEMBER CLAWSON: You're late.

CHAIRMAN MELIUS: Either late or it's --

MR. HINNEFELD: That was a first shot, Jim, wasn't it?

CHAIRMAN MELIUS: Yes.

MR. HINNEFELD: That was the first shot at the --

CHAIRMAN MELIUS: That was a first shot.

DR. NETON: I think the idea was that there was a proof of principle involved in looking at three of the exotics, you know, americium, curium and neptunium to see, you know, if anything came out of that original analysis.

I'm not sure what other exotics there are beyond those.

MR. HINNEFELD: Well, Dr. Melius just read the categories and things that fall into what we've been calling exotics.

January of this year was the original delivery of that Report 53 which we commented on rather heavily.

So that was done, but it's now, the rework of that is the americium, curium, californium that comes here in a little while.

CHAIRMAN MELIUS: Okay.

DR. NETON: Yes, I'd forgotten. The January 12 report was issued. It came out for internal review. I had some comments on it. It went back for rework and it's very close to being completed, though.

I think by the end of this month, it should be done. I can give a little bit update on the thorium.

CHAIRMAN MELIUS: Can I just go through the rest of these? No, you stay there, Jim, I don't want you to get away, I want to hear from you.

DR. NETON: Okay.

CHAIRMAN MELIUS: We have an OTIB-75 validity due in September, a neutrons due in August and the tank farm exposure geometry due in September. So that

was the list that was provided to us. So if you want to add or whatever?

DR. NETON: I was just going to add to the thorium issue. We had conducted three data capture efforts for looking for additional thorium records in January, February and March. Those record searches identified three boxes of information that we're going through.

There's been a little bit of a slowdown in getting them to be redacted, but we have one of the three. We expect the other two to be cleared fairly soon.

The bottom line, it seems, is that thorium was present after '72, but in much, much smaller quantities than it was before '72. So it remains to be seen, you know, what was done with those smaller quantities to generate exposure potential to workers and can we bound those?

CHAIRMAN MELIUS: I would just ask if you can keep the SC&A and the Work Group informed as these come in. Because this SEC has been going on for a long time and there's obviously a lot of frustration

there and I don't want, sort of, a report sitting around waiting for, you know, something to happen or for follow-up and when it, you know, might be critical in terms of making an SEC decision there.

I think you've already sort of prioritized in that way, so.

DR. NETON: Yes, I did.

MEMBER GRIFFON: And maybe even if you can revise that timeline that Jim, those dates that Jim just read out, a revision in that would be useful instead of just the, yes.

CHAIRMAN MELIUS: Okay, anybody else have questions for Mark? Rocky? You want to do Rocky? That is quick.

MEMBER GRIFFON: Rocky is equally as short. We haven't had a Work Group meeting since the last Board meeting. There has been an SEC and the Evaluation Report, I believe, is near-complete by NIOSH and they plan to issue it in the end of August and present it in the September, this is the right one, present it in the September meeting, which will be in Denver.

So really the Work Group will convene shortly after the meeting in Denver, I think, to take up the new ER report.

CHAIRMAN MELIUS: Good. Any questions on that? Okay. Good. Okay, other, start going through alphabetically. I figure we will go to noon time and then break for lunch, so if anybody's stomach is growling or whatever. Josie?

MEMBER BEACH: Okay, Brookhaven met in February just prior to the last Board meeting. Our main issue was, of course, the 83.14 that NIOSH proposed.

We took the time to go ahead and task SC&A and NIOSH to go ahead and look at the SEC issues and how they would affect the site post-'93 and to start working on the Site Profile issues.

We expect the work to come back on that from NIOSH mid-July. So that's all I have there.

CHAIRMAN MELIUS: Okay. Good. Questions for Josie? Okay. Fernald?

MEMBER CLAWSON: Last meeting we had was February 19. We still have several

outstanding issues. If you remember, we passed an SEC for the time period of 1968 to 1978.

It was voted on at the April meeting. We have, we still have several outstanding concerns. One of them is the time from 1953 to 1967 where they were using DWE information. We also have opened a coworker model for uranium that we're still waiting on a response back to.

And we haven't seen anything as of yet, but right now I'm setting up a Fernald Work Group within the next month or so and I've been working with John Stiver to come up with a date.

And I also talked to -- month and a half -- talked to Stu and them and find out where we're at on the coworker model for the internal exposure. And that's kind of what's holding us up on to a date to set forth.

CHAIRMAN MELIUS: Okay. Yes?

MR. KATZ: As long as we're on Fernald, I might as well register, we had absentee votes. During the teleconference

is when we added the SEC Class for Fernald, and Gibson, Poston and Richardson were absent, but they had, have all registered their votes since they've voted.

That was finished May 9. They all voted with the Board in favor of making that Class addition.

CHAIRMAN MELIUS: Okay. John, you want to have anything? Or Stu? I don't --

MR. STIVER: Yes, we were, as Brad said, we were kind of waiting on some feedback from DCAS about where they stand on Issue One, which is the, whether they get down the coworker intakes, I think they were going to go back and look at some actual case files from completed cases and if they had enough, they could pull some statistics together on that.

And if they determine that they could indeed do that, they were going to produce a White Paper, which we would then review.

As regards our DWE data, we had agreed in principle, I know, that with that

approach I know there's some dissatisfaction about some aspects of that, the DWE model from '53 to '67. Our follow-on work in looking at the data completeness for the thorium bioassay for 1978 to 1989, when we were looking at that, we discovered that it's really difficult to, and we also saw this for the earlier period, but to place workers in particular buildings in particular times.

And part of the DWE model really relies on that in order to assign people to particular facilities. And the DWEs are vastly different, obviously, in these different buildings. And so we're kind of concerned about the ability of NIOSH to do that in that particular model.

That's one of the things we wanted to look into in a little bit more depth. And so we're probably looking at, I would say August before we could realistically schedule a meeting.

CHAIRMAN MELIUS: Okay, yes, because you have a good statistical model, but we don't have input where people were.

MR. STIVER: Yes, exactly, you have to have the worker placement information.

CHAIRMAN MELIUS: Yes, right, sure. Okay, John? Stu and LaVon or Jim, can you do that, I guess, and Fernald?

MR. HINNEFELD: Well, I'll just comment that we are pursuing the first document about the coworker, if this has to do, I think it has to do with whether the entire coworker dataset has been broken out for construction workers. Isn't that the question?

But then there was another sub-task that kind of came out of that. I know ORAU is working on it now. I don't know how long they've been working on it.

CHAIRMAN MELIUS: It's not updated at all on the list we received.

MR. HINNEFELD: No, no, it's not on the list. And I'm going to have to check on the DWE issue that you just mentioned, John, that one was unfamiliar to me, so I'll have to, I'll go check. I came late to the game with Fernald because I'd only got

authority to work on it a few weeks ago.

MR. STIVER: This is John Stiver again. I might also add that we have a Data Completeness Report from a later period and some follow-on work that's in review right now that should be delivered to the Board within a week or two.

CHAIRMAN MELIUS: Okay, great. Thanks. Any Board Members with questions on that? Hanford. Now that I'm the chair of that, so we are now regrouping or will regroup after the 83.14 is presented. I forget when it, I believe tomorrow or today.

Is it, when's it on? Later today, okay. After that we've had a little side discussions here and we will be, need to, presuming that that's agreed to by the Board and approved, the NIOSH recommendation, then we will be in the process of looking at the post-'83 period there.

And we've also already made a significant amount of work in the review through SC&A on that and so I think it'd be pretty straightforward to be able to

identify any additional issues post-'83 that need to be evaluated and Arjun will be working on that and SC&A.

And so we would then convene the Work Group. There's also another outstanding, sort of on the original set of petitions there's another petition involving a laboratory issue and we should have a report, our SC&A report within the next month, Arjun?

DR. MAKHIJANI: Yes.

CHAIRMAN MELIUS: So why don't you update on that? It's complicated.

DR. MAKHIJANI: This is Arjun Makhijani, SC&A. We've had a number of interviews to do the work, it is essentially complete. Some stuff is in DOE review and interviewer review for verification.

I hope that by the end of next month that we will have completed everything and that the Work Group will have the report. A little bit will depend on how fast the DOE Classification review of the report goes.

CHAIRMAN MELIUS: I just want to

mention one other thing to the Board, I don't remember how this got circulated or how far it did, but we also ran into some issues with that regarding this ongoing litigation involving some of, one of these reports and some of the dose reconstructions involved and so we had to work out some other procedures for that, which I think worked satisfactorily, but it involved more involvement from the Office of General Counsel than we usually have in doing our work.

And so just heads up to people, if you're, I think it's the first time we've ever encountered this particular issue and hopefully it won't be common, but it worked out okay. We worked out a procedure, so that, and, but if you, you know, doing some of your work and you run into that issue or whether there's some litigation involved or something, then I think you need to be, let Ted know right away.

Anyway, just heads up on that. Took us 11 years or whatever it's been to find that, but we did. Okay. Idaho. Phil.

MEMBER SCHOFIELD: Okay. There are some outstanding issues still on the Matrix that are being updated on that and they're due out in September.

MR. KATZ: Hey, Phil, can you just bring the mic a little closer? Thanks.

MEMBER SCHOFIELD: Idaho, there's some outstanding Matrix issues that are being updated and they're due out in September. On the gaseous diffusion plants, we have some more issues that are due out in September.

Some were just posted to the O: drive, particularly in relation to, let me gets my notes here, sorry. There's a White Paper that's been posted on the comparison to Paducah gaseous diffusion plant, hard copy bioassay records to two plant databases, that was, came out in March.

As long as I'm on a roll, I'll go ahead and hit Pinellas. As you know, we have --

CHAIRMAN MELIUS: What, are you going to take the rest of the meeting off?

MEMBER SCHOFIELD: Yes. But we

did some on-site interviews, classified interviews, and those, that raw data is sitting on the O: drive, it has to be massaged and sent back to DOE for clearance. And hopefully, then we can schedule a meeting on it.

One of the big issues, still, is the same was, problems site-wide just tritium issues we've still got to deal with and of course that is classified. Some of that is classified.

CHAIRMAN MELIUS: And the plan is still to let Mound go first on that?

MEMBER SCHOFIELD: Yes.

CHAIRMAN MELIUS: Okay. So what do you think on the Idaho? I guess NIOSH is expecting reports in September on, which would be really, the, I think the essentially, responses of TBD?

MEMBER SCHOFIELD: Honestly, I would hope that given that data we could actually have a meeting in September to try and close some of these issues.

CHAIRMAN MELIUS: Okay.

MEMBER SCHOFIELD: I have been

contacted and I don't know how we're going to deal with that issue yet, but there's, about the, all the reactors and the bioassays and other issues that were related to that because of this huge, huge number of reactors that we had there and what they were, spread out over the timeframe there.

CHAIRMAN MELIUS: Yes, it's a big site. Stu, you want to?

MR. HINNEFELD: Well, our data that we submitted shows some completion dates in September. Those might be a little before they get to the Board, that might be more of an internal date.

CHAIRMAN MELIUS: Okay.

MR. HINNEFELD: I know we were at Idaho on a data capture just a week or two ago, gathering some data to go on, to help us in our response. I know we were just out there.

CHAIRMAN MELIUS: I would just add that I think, this is sort of the last, big, unexplored site, I think, and a very complicated site, as Phil mentioned and I think we need to try to be moving forward on

this. It's, unlike a lot of the other sites, there hasn't been an SEC petition to sort of move it along and I think we need to try to move that.

So Stu, if you can keep the reports moving and then Phil, when we get the reports, we'll get the Work Group together on that and see if we can get, decide how to handle that site and do that.

So when we sort of got behind, we combined it with the Argonne site, so it required a lot of work to do that, so that, John, yes?

MR. STIVER: Yes, I'd like, before we move on, I'd like to add a little bit of information about Pinellas. We conducted the interviews, we spoke with one of the senior HPs at Sandia.

Not Burkhardt, the other fellow, I can't remember his name off the top of my head, but he was very knowledgeable about the D&D period. And our concern was whether there was enough tritium bioassay and enough process knowledge to prevent them getting into some situations they weren't aware of

where people could have been exposed.

And it sounds like, you know, from what he told me, there is a lot of data available and so we may want to pursue obtaining some of that data as well.

And I don’t know how that might impact the -- a date for a meeting or we could just put that as a particular item to be pursued, but that's something we need to follow up on.

That's probably one of the SEC issues that was so old, kind of.

CHAIRMAN MELIUS: Yes, I think it needs to be done. I'm not sure it's something SC&A should be doing or NIOSH and who's handling that site? I can't remember.

MR. STIVER: Peter Darnell. And he'd been ill, obviously and was kind out of the picture, so this just came out as part of our follow-on interview, so we never really determined how to proceed as far as what entity would do that.

CHAIRMAN MELIUS: No, no, I know those interviews were helpful, so good. Maybe you can work out with LaVon while

you're here, just sort of a follow-up plan because again, that's another site that's an SEC that's been there for a long time and we need to try to move forward on that for that one in that site, also.

MR. STIVER: Oh, you know, that name, I'll have to go back to my notes. But he was there in the early '90s.

MEMBER SCHOFIELD: We did get a lot of new data from those interviews, will hopefully guide us here we're going to go.

CHAIRMAN MELIUS: No, no, I think that was good. Okay. I think we're, thank you, Phil, by the way, anybody else have other questions for Phil?

Okay. Yes, some of the idea of these Work Group reports is to, it gives us a chance to pin down NIOSH and SC&A on the record and what we need to do for follow-up and schedules and so forth.

But I think it helps us be more efficient with these and with communication, though I do think that NIOSH is, everybody involved has been doing a better job on that recently. So it's noon time.

Why don't we take a break and back here for 2:00 for the Weldon Springs? Then we have a busy afternoon.

(Whereupon, the above-entitled matter went off the record at 12:01 p.m. and resumed at 2:05 p.m.)

A-F-T-E-R-N-O-O-N S-E-S-S-I-O-N

2:05 p.m.

CHAIRMAN MELIUS: If everyone can get seated we'll get started. Good afternoon, everybody. Looks like familiar faces there so, good. Ted, do you want to do the roll call?

MR. KATZ: Yes, just check for Board Members on the line. Bill Field, are you with us on the line? How about Mike Gibson or David Richardson? Once again, Bill Field, are you on the line? Richard Lemen? Dr. Richardson?

MEMBER FIELD: I'm here. It is Bill Field.

MR. KATZ: Oh, Bill, great, glad to have you. And how about Mike Gibson? Okay then, let me just remind everyone that's on the line, mute your phones except when you're addressing the group, if you are someone who should be addressing the group.

Press * and then 6 to mute your phone for this line. And then press * and 6 again to un-mute your phone. There's still enough people hear to tell about the public

comment sessions.

CHAIRMAN MELIUS: Okay, this afternoon we're going to take up first the Weldon Springs Site. And unfortunately, Dr. Lemen was unable to make this meeting due to a last-minute issue that came up.

And he could not attend by phone either. So he'll not be able to present an update. And Ron Buchanan from SC&A is also unavailable, due to a previously planned vacation, I believe. But we will have an update from Stu.

MEMBER FIELD: We're hearing almost nothing here.

CHAIRMAN MELIUS: And we'll have an update from Stu Hinnefeld, Stu? Just before Stu gets started, Stu will update us. I think there are two outstanding issues on the Weldon Springs SEC Site, which is the radon issue and the thorium issue.

Since we don't have a Work Group here and wouldn't have a recommendation for the Work Group anyway at this point, it's not our plan to try to take any action on this SEC at this meeting. But it's more of

an informational update. Go ahead, Stu.

MR. HINNEFELD: Okay, this is Stu Hinnefeld again. At the last Work Group meeting, NIOSH was asked to present to the full Board information that we had about the model that we're proposing for reconstructing radon doses at Weldon Spring.

And in addition, if we could, to speak to the question of what information do we have to support our conclusion that thorium processing at Weldon Spring only occurred from 1963 and later.

And there's a further question about what do we know about the potential drying of the raffinate pits and what might potential exposure be from there.

The first two, I think I can speak about at some length. The final one I could speak about very briefly. But probably I'm not ready to speak in detail about.

First thing I'll go through now is the bounding radon model that we have proposed for Weldon Spring.

Weldon Spring did not ever

receive any uranium ores. They received ore concentrates and then also I think maybe some, what we would call scrap recycling, uranium compounds that were sent for purification. But we know they'd received uranium mill concentrates. This has been discussed at the Work Group a while, in a number of settings.

And going back to January of last year, when it was originally presented, the general description at the time was that all the radon is released during the processing. The radon that would be entrained in the mill concentrates would be released during the processing.

And it would be introduced in some fashion into the digestion building. There is some small amount of ventilation and from that you would build a steady state model to estimate the amount of radon, or a bounding intake of radon, to use in the dose reconstruction.

So another slide here speaks to some of the conditions that are described in May of 2011. The model apparently was

discussed and clarified some more.

And then in June of this year we were asked to provide additional details about the model to the full Board so that the Work Group, I think, felt a little uncomfortable with the issue on their own.

They felt like they wanted to expertise of the full Board to participate and know about how the radon model was being presented.

In order to estimate how much radon would be generated in a year it's necessary to estimate, or to know how much material was processed through Weldon Springs. And various different sources give different estimates of that.

As far as I can tell they range from about 5 million kilograms of ore concentrate up to about 14 ½ million kilograms of ore concentrate.

There might be a document that would lead you to conclude it may be a little higher, maybe as high as 16 million kilograms per year. I'll get to that in a little bit. That's the materials balance

report that was written for Weldon Spring.

But at any rate, that would be the total amount that would be fed, the estimate of the amount of material that was fed through Weldon Springs.

So an annual radon release, then, that would be released by that amount of ore concentrate at a 1 percent uranium, radium present at 1 percent of the uranium activity. So in other words the radium activity is 1 percent of the uranium activity, which was considered by the person who made that estimate to be a conservative upper, a high-end estimate for ore concentrates. Chances are there wasn't really that much radium in the ore concentrates.

The person who made that original estimate and also estimated the range of radon emissions, 12 curies to 34 curies, actually worked for Argonne National Laboratories in the 1980s.

MR. KATZ: Stu, can you hold just one second? People on the phone seem to have a lot of background noise. Is there

something we can do here about this?

I'm not sure if it's because some people on the phone have not muted their phone lines. Because I have a phone right here which is very clear, listening to my phone. I'm hooked into this just as the people are here on the remote.

It sounds clear as a bell to me so I'm mystified. But I have gotten a couple of messages of people who had a hard time hearing. I don't really understand it.

MR. HINNEFELD: All right, in the 1980s, Argonne National Laboratory wrote an estimate of historical doses from the Weldon Springs Site.

They included in that a radon component. And that document was written in terms of doses to the surrounding population. What would this have caused? What would this site have caused to the surrounding population.

And so they developed these radon generation rates of between 12 and 34 curies per year. The assumption of 70 percent of the material was uranium is the assumption

about the uranium content of the uranium concentrate, the ore concentrate.

The bulk of the remaining probably being oxides and maybe, I guess, some sodium because it came with sodium diuranate, so other parts of the molecule.

The equilibrium between radium and radon, well, that's a given that when you have that much radium you're going to have a certain amount of radon generated continuously.

And so the estimator, at least, from Meshkov et al, that's the Argonne study, arrived at that 12 to 34 curies. For our purposes here we selected the higher value, 34 curies per year, and just went from there. And all this data is from Weldon Spring, that it was used just from Weldon Spring. We didn't use data from any other sites.

The digestion building, which would be where the concentrates would have been digested in order to be refined to go into the extraction process and refinery, was the building that was selected to be

likely to have the highest concentration.

We don't really believe that all the radon that was evolved during the process necessarily stayed in that building. We think probably some of it went out stacks.

But the model presumes that everything that's evolved is fed into that building. So you have now an input rate.

There's an expected ventilation rate of one air change per hour, which is a pretty low ventilation rate for an industrial building, which is what these were. These were steel structure, transite siding buildings.

And so that's your output rate. And so you have an input rate and an output rate. And that will give you an equilibrium condition at some concentration.

The calculation of working levels, which is what we wanted to convert this radon concentration into, because the working level is a little more meaningful in terms of workers' exposure.

And also, IREP expects a radon

dose to be in working levels or a working level month. Based on the equilibrium factor of .5, one working level is 100 picocuries per liter of radium in full equilibrium. So if you're at .5 equil,ibrium the working level, essentially, equates to 200 picocuries per liter. Working level being a measure of the progeny, not the radon. It's a measure of the radon progeny.

The hours in a working level month are 170 and the number of occupational work hours a year we took to be 2,000. And so those values plug into the model.

The equilibrium concentration for radon is described by this equation where one is the influx rate in picocuries per hour. V is the volume of the building. And ACH is the air changes.

So you substitute in the values that I just described. You get 150 picocuries per liter. Then you do the working level month conversion with these values where you have the working level months.

You start with what we just calculated, the picocuries per liter. You do the conversion from picocuries per liter to working level months.

If they were in equilibrium over at the end, you have equilibrium factor where you adjust for the .5 equilibrium as opposed to the full equilibrium.

And then you have the time duration, 2,000 occupational hours divided by 170 hours in a working level month. And so you arrive at a bounding working level month per-year exposure of just under nine working level months per year.

So that's the model that we use for the radon concentration in the building. We believe there are conservatisms in the selection of 1 percent of radium. We believe that's probably high.

And we think there's a significant conservatism in the assumption that all of the evolved radon ends up in this one building and is confined in the volume of the building.

So that's it. I don't know how

better to explain it. I'll answer any questions if anybody has any.

MEMBER ANDERSON: I've forgotten it. Were any measurements ever made in the facility for radon?

MR. HINNEFELD: Not during the operational period. During the remediation period later on there were some radon measurements made.

But the ore concentrates, probably were gone by that time. All that was left was some raffinate in the pits and then whatever contamination was around the place.

MEMBER ANDERSON: While you didn't use surrogate data, how does this compare to other facilities where radon has been an issue and they processed ore?

MR. HINNEFELD: Well, they didn't process ore at Weldon Spring.

MEMBER ANDERSON: No, but it isn't processing ore, I mean concentrates. This isn't the only concentrate used.

MR. HINNEFELD: Yes, most of the radium has been removed. So you've got

significantly less radon than you would have if they had actually processed ore.

I don't know if anybody knows off hand the kinds of radon concentrations we've seen in place or had ore stored. Do you guys know of any? I don't know that I've got a comparison on here.

CHAIRMAN MELIUS: So the contrast of this with, hate to mention this, Wanda, Blockson. Blockson, the building was a little bit more and the operation was more complex.

MR. HINNEFELD: I think that in Blockson, probably all the radon did evolve in that building. And I think in this case it probably didn't, even though we made the assumption that it did. So we would have that additional bounding measure on this model.

CHAIRMAN MELIUS: Right. And the single-building scenario, you would say would make more sense here than it did at Blockson.

MR. HINNEFELD: I believe there's more conservatism into here in terms of getting, all this radon wasn't going to end

up in this building. But we assumed it went all the way through.

CHAIRMAN MELIUS: Brad?

MEMBER CLAWSON: Stu, I know you're not the authority on this but when Weldon Springs first started out, they were going to use Blockson and they were going to use Fernald because as they said, they didn't have any data.

Now all of a sudden we have data. And I have not really got a clear of what changed. Did we find some information or --

MR. HINNEFELD: Well, I don't know if we ever proposed surrogate radon data. Go ahead.

MR. RUTHERFORD: Yes. Actually, originally when we did the Evaluation Report, one of the things that we looked at was the fact that they did talk about using Fernald radon data.

And at that time, surrogate data was becoming a hot issue. So I told our people, when you do the Evaluation Report, try to do it without the use of surrogate data, period. And so that's why they went

and they developed the model.

MEMBER CLAWSON: So we actually do have radon measurements from --

MR. HINNEFELD: No, it's a model. It's a model based on conservative assumptions of the amount of radium present and then all the radon that's evolved being placed into this one building.

CHAIRMAN MELIUS: So the data's really is production and then the throughput and the --

MR. HINNEFELD: We do have data on production now.

CHAIRMAN MELIUS: Right, in buildings and so forth. But there is data there but it's production data, I guess it is. So it's not monitoring data.

I don't think in this time period that you ever found monitoring data for these. Wasn't that one of the issues that came up with Blockson? I'm trying to recall whether --

DR. NETON: We had some monitoring data later on in the period of Blockson, some very limited data, but

nothing that was useful. That's why we ended up with a model there as well.

CHAIRMAN MELIUS: Anybody else with, Bill Field, I don't know if you --

MEMBER FIELD: Yes, Jim.

CHAIRMAN MELIUS: Do you have any questions or --

MEMBER FIELD: Yes, can you hear me okay?

CHAIRMAN MELIUS: Yes.

MEMBER FIELD: Okay. I'm not on this Work Group but I was able to attend the last Work Group meeting by phone. That wasn't all that long ago.

And I think it can be bound using the model that they've proposed. I just have some questions about some of the assumptions in the model itself.

I have provided some references where the percent of the material was higher than 70 percent. And I was just going back and looking at where that arrived from.

But I'm not sure. I struggle with it myself that that's a conservative figure. And then I understand how the

equilibrium ratio was calculated.

But in my experience, assuming a 50 percent equilibrium ratio for a building that has reasonable air movement I think that's not a conservative function. But these are all specifics with the model itself and not so much with can it be bounded.

CHAIRMAN MELIUS: Any comments, Stu?

MR. HINNEFELD: I actually didn't hear what his comment was about the equilibrium factor. He kind of faded there.

MEMBER FIELD: Yes, what I was saying about the equilibrium factor, I avoid that. I understand you calculated empirically using this model.

But based on my experience with buildings, that equilibrium factor's fairly low. If there's very little air movement I would expect a much higher equilibrium factor.

MR. HINNEFELD: Okay, so there'd be some discussion about what the appropriate factor should be --

MEMBER FIELD: Right, these are specifics about the assumption and not whether or not it could bounded.

MR. HINNEFELD: Right, okay.

CHAIRMAN MELIUS: Any other questions? Again, we're not trying to reach closure this meeting. We probably will at the next meeting.

So keep this in mind if you have questions that come up, more information on the model, please try to get them to Stu or to the Work Group before the next meeting. But I think we pretty much exhausted this one. You want to move on, then?

MR. HINNEFELD: Well --

MS. M. JOHNSON: Excuse me?

CHAIRMAN MELIUS: Yes?

MS. JOHNSON: This is Mary Johnson. I'm the claimant under the petition.

CHAIRMAN MELIUS: Yes, when Stu is done with his presentation I'll ask you to speak. Because he's going to cover, I believe, at least two other issues.

MS. M. JOHNSON: All right, thank

you.

CHAIRMAN MELIUS: Okay, I'm sorry. I should have mentioned that earlier. It's my fault.

MR. HINNEFELD: The second issue that I can speak to is the thorium. When was the thorium processing done at Weldon Springs? We know that mainly it was a feed materials plant. Mainly it processed uranium. And our conclusion or our position is that there was thorium processing there. Yes, they did purify thorium but that didn't start until 1963.

In support of that, we have a number of references. One is Reference ID 8252 in our Site Research Database. The title of this document was prepared by, looks like, DOE Oak Ridge in July of 1986.

And it says Historical Nuclear Materials Balance Report for the Former AEC-owned Weldon Springs Chemical Plant. It describes the sources they used to compile this information.

Where you see data search activities included, two thorough searches

of retired AEC DOE files retained in Oak Ridge and inspection of the files retained in Weldon Springs, Number 2, Number 3, contacts with U.S. government's records center in Winnebago Street, St. Louis and four reviews of active DOE files.

And it says only Items 1 and 4 produced usable information. One being the retired AEC DOE files in Oak Ridge and four being the reviews of active DOE files. So they got this information from there.

The data that they used were data summaries and annual material balances. See if they came from data compilations and their associated work papers prepared by AEC employees and monthly material balance reports provided to the AEC by the operating contractor.

So when they compiled this report they looked back to the inventory documents that DOE had kept for Weldon Springs. There's a tabular representation of the thorium inventory.

And it has a column for, this is the number of kilograms -- and this is by

year, by fiscal year -- the beginning inventory, the receipts in that year, the removals, which can be shipments and discards, meaning throwing away, the ending inventory.

And then there's a column called inventory difference, which is what the Department of Energy would do to resolve inventory differences, because it didn't exactly balance. It'd always have some inventory difference in their record.

For thorium, at Mallinckrodt they didn't do that inventory difference resolution until the final year. So that's all zeros until the final year. And they just did the one resolution.

This table shows that there was no thorium in the beginning of 1958. They received 44 kilograms in 1958. That remained their starting inventory every year through 1962.

In 1962, 39 kilograms were removed so they had an ending balance of five kilograms. And then in 1964 they started receiving, this is fiscal 1964 so it would

have been the last half of calendar 1963.

They started receiving thorium in the tens of thousands of kilogram range in '64 and then hundreds of thousands of kilograms in '65 and '66.

So there was a materials balance report that was prepared in 1986 from what appeared to be the original inventory control documents that described that thorium content. We also had a question about, was this thorium that was received and used there recycled thorium. In our program we refer to recycled thorium or recycled uranium as those materials that have been in a reactor, irradiated in a reactor and then purified, re-purified back to thorium uranium.

But when they're refined back, they're not entirely pure anymore. You can bring along some contaminants in it that can change the radiological exposure characteristics of it.

For instance, in recycled uranium, usually it brings along a little plutonium and neptunium, which alters your dose

reconstruction because you have to count the doses from those nuclides. In thorium, it bring along U-233, uranium 233, there's some of that there.

In this instance, it appears that all of the thorium that went to Weldon Springs went there from the Fernald plant. And it appears that the Fernald plant did not start receiving recycled thorium from Savannah River until 1966, essentially the end of Weldon Springs' existence.

We have several references that talk about that. Let me see if I can find some of these from Savannah River. I won't go through the reference IDs, although we do have it. We'll have to write-up some of this. We haven't written it. This just came together in the last few days.

They have a memo about production of byproduct thorium nitrate solution handling and storage. They had a meeting about it to talk about what are they going to do with this recycled thorium, essentially, this thorium byproduct.

And in there, there's a schedule

that calls for the first shipment from Savannah River to occur in the late '66 to '67 time frame.

So that's where the recycled thorium went from when it went to Fernald. And so they were shipping it around '66 or '67.

We also have, from Fernald, a report from 1967, this would be April of 1967, called Analysis of Health Problem in Processing Recycled Thorium, in which they are preparing to receive or handle, preparing to deal with the recycled thorium that they received from Savannah River.

And they are saying this is the things we have to worry about. And they talk about fission products and the other things that can be contained in recycled thorium. And that dates from 1967.

There's a further memo. This came from Fernald. This was a later document. This was prepared in, I believe, the 1980s. The title of the document is Thorium, A Search of the Available Records of the FMPC.

It describes the thorium work at

Fernald. It speaks about, in 1963 the AEC expressed the need for a quantity of extremely pure thorium nitrate for the production of dense thorium dioxide.

They took some thorium nitrate they had on hand and they described the chemical purification they did to make is super-pure in order to send to Mallinckrodt Chemical Works, which by 1963 was Weldon Springs. But Destrehan Street was closed.

So in here they're talking about this was the thorium that they then purified to a greater extent than normal to send to Weldon Springs in 1963. And those are the receipts that we saw arriving at Weldon Springs in the materials balance report that we started talking about.

And, finally, attached to this is a list, apparently of all the thorium work orders that Fernald found in the 1980s. And maybe it's all of them.

And in there, there's a work order to send essentially 40 kilograms in 1958. And then there are several others to send many, many more kilograms in '63 and later.

So in terms of when it arrived and whether it was recycled or not, we think we have a pretty complete story. And we managed to put that together with these documents.

CHAIRMAN MELIUS: Brad, I think you were the one that had raised this issue. Is that making sense to you? I mean, it's a lot to absorb and to be able --

MEMBER CLAWSON: -- right, to be able to put my eyes on it. Just the documentation, and I understand, when you went back you used a memo that was a mass balance. But it was taken from other documentation.

MR. HINNEFELD: It was a mass balance summary that was written in the 1980s. I think it was 1986. And they described in it the documents that they used, where did they find the information that they used to put into that report.

And we can provide the entire document. It's on the SRDB. We can put it on K: drive or provide it, send it to wherever you want to send it.

MEMBER CLAWSON: I just wanted to

look at it because it seemed like to me that I'd seen other documents that talked about a whole other process but from the earlier years.

MR. HINNEFELD: There was a process -- yes, what you're talking about is a process that occurred at Mallinckrodt and a document that was written again in the '80s for an epidemiology report that described thorium work. And that gave the impression that that work continued at Weldon Spring.

MEMBER CLAWSON: The document actually said that it continued on --

MR. HINNEFELD: Yes, that it continued at Weldon Spring. We've not found that in any of this. We have not. And we tried to interview -- well, there were two persons involved in preparing that document in the 1980s.

We interviewed one who essentially couldn't remember or didn't tell us that, oh yes, we know for sure that went over. We didn't get anything useful. The other person would never call us back or declined to talk to us. So we could only interview one of the

two.

MEMBER CLAWSON: And you understand my position on this because I've got one document that's saying that it did and then, even the same time period to that, you're using a document that says it didn't. But I will review the information, and we'll proceed on. Thank you.

CHAIRMAN MELIUS: Any other questions for -- and you are writing a report and all this will be documented --

MR. HINNEFELD: We will put this together. I'm sure some of this has been written before. But we will put it together concisely to address this issue only and include the references and make them readily available.

CHAIRMAN MELIUS: Okay. And now, the third issue?

MR. HINNEFELD: The third issue had to do with the contention that the raffinate pits dried out. And therefore there would be a potential for re-suspension of material in the raffinate pits.

I believe this probably relates to

the interim period between closure of Weldon Springs in '66 or '67 and the start of remediation in the late '80s.

I think probably if the people were at Weldon Springs they would not let the raffinate pits dry out. They would pump some water back on the raffinate pits.

Pits 1 and 2 had the shallowest amount of water. They only had a few inches of water on top. Pits 3 and 4 had far more water on top. So the document that describes the drying of the pits talks about pits 1 and 2.

Those documents were written in '88 and '89. One was the sampling plan for the raffinate pits. Another was an EPA environmental impact statement. They both make the statement that those raffinate pits could dry out during the dry season.

We have looked at what we can. We know that there was air sampling being done around the raffinate pits in '87, starting in '87. And then that expanded in '89 when the remediation work got going. So we had more sampling in '89.

In '87 and '88 a document that I received over the weekend didn't include the actual monitoring results that were collected in '87 and '88 and '89. But they were described as being indistinguishable from background.

Now it could be the environmental monitoring for it that was written said that maybe all the results they gave, indistinguishable from background. They may not have actually given the results. From 1990 on there are numerical results for the environmental monitoring.

So during this period there was some sampling done, not throughout the period but during a course of the period. During a couple of years when the rainfall was less than average, they've looked at the rainfall for all those years, '87 and '88 rainfall, or '88, '89's rainfall were less than average.

And they didn't see any particular airborne activity during those periods. So I guess by extension we would feel like that would be fairly indicative of the situation that was faced over the period of time when

the pits may have dried out.

And there wouldn't have been that much resuspension anyway. So that I just got. And that's not quite as far. Haven't been able to get as much information together about that as I have about the recycled thorium.

CHAIRMAN MELIUS: Any questions on that issue? Thank you, Stu, for summarizing and doing so on relatively short notice here. We appreciate that and follow-up.

I believe that the petitioner is on the line and would like to make some comments.

MS. TRIPLETT: Tina Triplett, and I have a couple of comments --

CHAIRMAN MELIUS: Okay, go ahead.

MS. TRIPLETT: -- about the raffinate pits.

CHAIRMAN MELIUS: Is this Karen Johnson?

MS. TRIPLETT: No, this is Tina Triplett.

CHAIRMAN MELIUS: Okay. Go ahead, sorry. Karen was on earlier. That's why I was confused.

MS. TRIPLETT: -- we were just

talking about the raffinate pits. There was only, I believe, three references cited by NIOSH stating that there would be no significant exposure from the pit.

But we have 11 cited references that state the exact same thing, where the pits could have evaporated, leaving that dry and cracked surface, which depended a lot on the temperature and the precipitation during those time frames, especially in the summer months. One of the things, and the document stated the most significant physical hazard connected to the pits was the quicksand nature of the contained residue, which NIOSH failed to detail that under a response to SC&A, SEC issue Number 7.

Other details that were omitted was that the pits did dry to that quicksand nature during the summer months and that most of the material around the edges in the dry weather dried to a light, fluffy texture. So if those did exist it would create an exposure that cannot be dosed according to SC&A.

CHAIRMAN MELIUS: Does SC&A have that information?

MS. TRIPLETT: I believe so.

CHAIRMAN MELIUS: Okay, then we'll make sure it's followed up on.

MS. TRIPLETT: And I do have a list of the documents too. I can re-send if I need to.

CHAIRMAN MELIUS: Yes, just to make sure. As I said earlier, Ron Buchanan from SC&A could not be here today and is not on the phone. So we don't have him to check with. John Stiver, you want to --

MR. STIVER: Yes, I can just say that Ron is in the process of putting all of this together. And we have some responses. So it won't be long, maybe another week or two. He'll be back at the end of this week.

CHAIRMAN MELIUS: Okay, thanks. You have any other further comments?

MS. M. JOHNSON: This is Mary Johnson.

CHAIRMAN MELIUS: Okay, go ahead.

MS. M. JOHNSON: I would just like to have it on the record that we are very, very, very disappointed, to put it mildly, that this is not being voted on today. This

will be the third time we've been told at the next meeting a vote will go. We have waited time and time again for some kind of decision to be made, and we are tired.

I am beyond frustrated, disgusted, and I think this is a ridiculous procedure. If any one of you people would step back and just look for one second like an outsider and place yourself in these claimants' positions, the amount of work, effort, research, assumptions, whatever it takes that you have gone through to try to deny us is absolutely ridiculous -- that they immediately need to go to school and get their doctorate in physics to understand this program, no other equal way that a claimant can have any kind of closure.

Now you are asking us to wait two and three months more to get an answer. This is beyond, it's disrespectful. What does it take to get some justice in this program?

MS. K. JOHNSON: Hi, this is Karen Johnson, too. I would also like to state that -- suspicious that none of our Work Group Members have made it here today.

It's disrespectful. I'm

disappointed. We deserve more respect, and we deserve more Work Group representation on our Work Group, more Board representation on our Work Group.

CHAIRMAN MELIUS: Okay, thank you. Anything else?

MS. K. JOHNSON: I think that's it.

CHAIRMAN MELIUS: Okay, thank you very much. So we'll finish up reports. We'll get going, reconstitute a Work Group meeting. And I expect by the next -- hope by the next meeting we'll be able to get this resolved.

Okay, back to Work Group work reports. Let's see where we are. Lawrence Berkeley?

MEMBER ZIEMER: At the Oakland meeting I gave an update on the status of Lawrence Berkeley. We've not met since then so I have nothing further to report at this time.

CHAIRMAN MELIUS: Okay. Linde we'll hear from on Thursday.

MR. KATZ: People on the line, will you please mute your phones. Press * then 6 to mute your phones. We're hearing a lot of

background noise that I'm sure is getting in the way of the other people on the phone hearing. Thank you.

CHAIRMAN MELIUS: Mound we'll also hear from later. Nevada Test Site, do we have any activity there?

MEMBER CLAWSON: No.

CHAIRMAN MELIUS: Pantex?

MEMBER CLAWSON: Just to let you know, on Pantex original --

CHAIRMAN MELIUS: Talk directly into the mic, please.

MEMBER CLAWSON: -- SEC was from 1950 to 1991. As you know, we've passed an SEC for 1958 to 1983. One of the reasons why, is we didn't have sufficient data for the 1950 time period to '57. We're still working on that.

In 1991, due to the rise of the recycled uranium issue, Pantex did over 300 bioassays. And at the last Work Group meeting we had NIOSH was going to go back and look at being able to use that for the time period from 1984 to '91, to be able to see if that would be able to be performed.

We're still waiting on that information. That's in NIOSH's court. I understand that there are some document issues and problems. But we'll probably have another Pantex Work Group to be able to go over that.

CHAIRMAN MELIUS: Yes. I think my understanding from talking to Greg and DOE, I think we're in the process of resolving the documentation issues. And so they should be forthcoming relatively soon, and we can move on on that issue. I know it's been awhile, and there was a little bit of confusion over reviewing some of them. But I think it's resolved.

But let's make sure everybody continues to communicate on that. Because that was some of the problem that we had going on there. So we've talked.

Anybody else have questions on Pantex and then, I believe, you're going down for data capture.

MEMBER CLAWSON: Yes, it is. But that's actually for Medina, Clarksville. But we're going to try to look at some of the data that has been held up there.

CHAIRMAN MELIUS: Okay, good. Thank you, Brad, for all your efforts on these. Dick Lemen's not here. Do you know if Sandia, if there's been any activity?

MEMBER BEACH: We haven't had any meetings.

CHAIRMAN MELIUS: Yes, okay, that's right. And same on Santa Susana, correct?

MEMBER BEACH: That's Phil's now, it looks like.

CHAIRMAN MELIUS: Yes, just very recently.

MEMBER SCHOFIELD: So I haven't got anything done on it. I'll be honest with you there.

CHAIRMAN MELIUS: Well, that's why I was being honest and pointing out you haven't had much time to get much done.

I guess David's not on the line. Science Issues Group? Has there been a meeting, Paul or whoever?

MEMBER ZIEMER: Well, I'll report, and maybe Gen can also participate. The Science Issues Group did meet. I forget the date. It's been several weeks ago.

And we met with the folks from SENES Oak Ridge, who went through a fairly extensive document, trying to recall all the focus there. Gen, help me out.

MEMBER ROESSLER: DDREF?

MEMBER ZIEMER: Well, dose rate factors. But that's a very extensive document. All we've done so far is have them review for us what the issues are.

And they've done a very extensive job of pulling together all the current literature on this. I actually don't recall what the next step is going to be on that, Gen.

MEMBER ROESSLER: NIOSH is going to do a peer review on it. And they asked for ideas for peer reviewers. I turned in a list. And I think that was the one thing they were wanting from the Group.

DR. NETON: Right, we had not had this reviewed externally for scientific peer review. We indicated we'd like to get this done in three to six months time frame.

I have a list now of about ten external reviewers we'd like to use. Maybe

five or six to review the document, a good dispersion of backgrounds to review it. And we'll report back after that time.

CHAIRMAN MELIUS: Okay, great, thanks. Thank you, Paul, for stepping in. SEC Issues Work Group, I think I've already reported.

The only meeting we've had has been a short meeting to talk about the sufficient accuracy issue. And we're waiting on the NIOSH report. Wanda, Subcommittee on Procedures.

MEMBER MUNN: Procedures met last on April 11th and continued the work that we've had in hand for quite some time, for the most part.

I think the Board's aware of the fact that we've had almost 540, I think it's 539 is the number that the database gives us, of the number of findings that we have been working on.

And we continue to close out a few from time to time. And in terms of good progress we continue to move slowly in the right direction, in any case.

One of the things that might be confusing to people if they review the database is that it cannot, at the current time -- and we discussed this during our meeting -- the only thing that it doesn't do now, that we had laid out that we wanted to do, was it does not give what we have always called our Summary Report, which gives the grand totals of how many of the outstanding issues are still open. Most of the open items that we have left are related almost entirely to procedures which are no longer viable. They have either been superceded or have been cancelled for one reason or another.

They're still on our list because they may have issues embedded in them which translate to current procedures. But for the most part, that's not the case. For the most part anything that does translate into current procedures has been identified and is worked on the list.

The database is operating pretty well. We're rather pleased with it. The hot links are particularly helpful when we are

working in the database. And we're looking forward to the time when it will be more widely used by other organizations inside the Board structure.

We have begun some discussion of putting together the overarching issues list and incorporating it into our database. We are closing out, within the next couple of weeks, closing out the last pair of two page reviews that I am still working on.

And we'll undertake, at the next meeting, to take a look for the first time at the new set of two pagers, which have been provided to us by SC&A.

Later in the meeting, I believe, SC&A is going to talk to us about the request that they've given to us asking the entire Board to take a look at what their expectation is for additions to work upcoming.

And at that time I may have some comments about what we might be looking at in the future. But for the time being, our next meeting is scheduled for July 31.

CHAIRMAN MELIUS: Okay. Thank you. Are there any questions for Wanda? And we

will expect comments on the SC&A.

MEMBER MUNN: You will undoubtedly have a few.

CHAIRMAN MELIUS: Undoubtedly. Uranium refining?

MEMBER ANDERSON: We've been very active. We have switched membership, so I want to welcome our newest Member, David Kotelchuck. And right now we have one SEC that is basically on hold waiting for the release of a clearance document for us. And so it's sort of out of both NIOSH's hands. Oh, you've got it, you brought it?

MR. RUTHERFORD: Hot off the press.

MEMBER ANDERSON: My gosh.

MR. RUTHERFORD: I mean I just got an email that the Navy said we will be getting a document very soon, meaning within the next couple of weeks.

CHAIRMAN MELIUS: Check's in the mail.

MEMBER ANDERSON: Check's in the mail. Well, that's good. Then before the next meeting we should be able to review that and have a discussion.

Because I think we've closed out most of the issues except for that. We did get a notice, or a letter from the petitioner asking for a hearing. But of course we don't do legal proceedings, hearings here.

And there was a reply to that. But I would assume, when we have the Board meeting to go over our final recommendation, we would be sure that they would be available to make comments. Otherwise, most of our issues are on Site Profiles.

CHAIRMAN MELIUS: Good, any questions for Henry? And last but not least, Worker Outreach.

MEMBER BEACH: Okay, so Worker Outreach has two issues it's working on at this time. And we did pick up a new Member also, so welcome, Loretta. We'll be happy to, in fact, very ecstatic to have you with us.

The first issue, in early 2010 we tasked SC&A to review a procedure that was recently issued by NIOSH, OCAS-PR-12. It replaced an earlier version, Procedure 0097.

SC&A completed their review, which was submitted to the Work Group in April of 2010.

This addressed a number of concerns ranging from how worker comments are tracked, addressed and documented in the tracking system, to whether relevant outreach venues are pursued.

In advance of the October 2010 meeting, SC&A developed an issues matrix for us for the Procedure 12 actions. There was a revision to that in 2010.

The Work Group provided its comments on PR-12 and asked to see a revision to that earlier document that was in development at the time.

This matrix was updated in 2012 so if you followed we've actually had an update, three different matrix on PR-12. We also had a change in our lead for SC&A at the time.

Let's see, where we're at now is NIOSH has reported that DCAS expects to be able to provide a response to the Work Group, to the March 2012 findings, by July 9th, is the date. And a draft copy of the Procedure 12 was sent to the Work Group and SC&A on July 7th, 2011. And at least one of the recommendations was put into the revision

back in March.

So the process is working. However, we're hoping to see a closure to the Procedure 12 at the next Work Group meeting. They just had to fine tune it, basically.

Okay, the next issue we're working on is the outreach pilot. SC&A was tasked by the Working Group. And I've reported on this before. I just wanted to bring everybody up to speed with the new Members.

We tasked SC&A to prepare an evaluation plan for Objective 3, which is out of our mission statement or the mission of our Work Group. It's part of the implementation plan.

This objective focuses on assessing DCAS's consideration of worker input, incorporation of that information into technical work products, and communication regarding the disposition and impact of meaningful comments.

The Work Group agreed that the pilot evaluation is warranted and selected Rocky Flats Plant for the initial review.

An implementation plan was drafted

by SC&A back in December of 2010, which described a process for SC&A to review worker comments, determining the outcome of the comments consideration, and evaluate the follow-up of communication efforts.

Given the numerous comments -- I believe there was over, I think, 900 comments, there was a great deal -- within the Work Group we decided that we would break that down into a smaller sub-sampling, which ended up still being almost 200 pages.

Anyway, to this end SC&A developed a sampling evaluation plan. It was reviewed by the Work Group, given final approval back in November of 2011.

SC&A evaluated 101 randomly selected comments from a pool of 363 comments. These comments were submitted to NIOSH for input and validation back in February. And we just received last Thursday their initial review responses in time for this meeting.

However, Stu, they're going to finalize it and get a report to us again in July. I believe on the 9th. So hopefully we'll be able to plan a Work Group meeting

once SC&A takes a look at those comments. And I'm hoping in the first of August time frame.

CHAIRMAN MELIUS: Will SC&A be ready?

MR. FITZGERALD: We're already working on it, and we should be ready by August.

CHAIRMAN MELIUS: Thank you. And thanks for NIOSH for finally getting that, moving along there.

MEMBER BEACH: It is tough. It's a lot of work. And it goes back many years.

CHAIRMAN MELIUS: Any questions for Josie?

(Off the record comments.)

MR. KATZ: Hello, there's someone on the line who is trying to speak to someone else but not the Board. This is the Advisory Board on Radiation and Worker Health. Whoever's speaking could you mute your phone please?

CHAIRMAN MELIUS: It's someone trying to reach you, Sam.

CHAIRMAN MELIUS: Sounded work related. Okay, that takes care of our Work

Groups' reports. Not of our Work Groups but at least of the reports here.

And we have two issues that I want to just try to remind everybody scheduled for tomorrow for Work Group session. One will be to go over the response to comments, the two meetings.

So if you can read those over tonight, I thought I'd remind everybody this morning. Shouldn't take long but as long as we've read over and identified any ones that you have, main thing is to identify ones that you have questions about what the response is to those. But if we try to read it here for the first time it gets a bit tedious and not very helpful.

So the second thing I would like to accomplish tomorrow, we have a fair amount of time for a Board work session later in the afternoon, would be the SC&A tasking.

And John Stivers sent it, and Ted circulated an email to everybody. I think the memo from John that lays out a number of possible tasking assignments that we would need to look over and so forth.

I think at the end of the day tomorrow would be a good time to do that. We will have gone through enough of this meeting to know where we basically stand on most of the sites that are under consideration. And we should be ready.

But the way their fiscal year is set up it's important that we get the assignments into the pipeline here now so they can get to work. It involves some guesswork and a little bit of some contingency. But it's something we need to talk about tomorrow. So anyway, if you can all please read up on that particular memo so we're ready to talk about it tomorrow, do that.

And see we talk about it and Ruben walks in. Okay, I think we need to wait until 3:15. So why don't we take a short break and try to get back here right at 3:15 so we can do the Hanford one. Because a petitioner may very well be on the line for that.

(Whereupon, the above-entitled matter went off the record at 3:08 p.m. and resumed at 3:15 p.m.)

CHAIRMAN MELIUS: Okay, it's 3:15.

We'll get started.

MR. KATZ: Folks, while people are getting seated, let me just, for the benefit of people here from Los Alamos or the area, any of the New Mexico sites, who would like to speak, there's a -- hello, excuse me, attention.

There's a public comment session tonight at -- begins, I believe, yes, at 5:15, 5:15 to 6:15. If you would like to make public comments, there's a book outside the door where you can sign in, a registration book for that, and then we'll have your name and can call you during that public comment session.

CHAIRMAN MELIUS: Okay, the first session right now is the Hanford SEC Petition. It's a new petition, an 83.14.

And Sam Glover got his own audience here so we'll get tough questions then, Sam. We're not going to let you off light like we do LaVon.

DR. GLOVER: Thank you, Dr. Melius. Is this okay? Everybody can hear me?

All right. So we're here today to

talk about the 1972 through 1983 time frame for Hanford. And I just wanted to kind of start off by this has been a lot of work, been a lot of work in coordination with the Board, with its contractor.

DOE has been tremendous. I won't name names, but going out of their way to be extremely helpful in trying to find claimants. Had people from the past to come and give us interviews.

It's just been a tremendous effort all the way around, and so I really wanted to let folks know and as well as, you know, the people who came in for the interviews. They've been extremely helpful.

We'll wait for the computer to think. There it goes.

So this is an 83.14. It's a continuation of earlier petitions. The proposed Class is all employees, the Department of Energy, its predecessor agencies and their contractors who worked at Hanford Engineering Works from July 1, 1972 through December 31, 1983.

Just a little bit of history for

new Board Members, and this has been going on a long time, and so I want to make sure we kind of get the history of the first Class. There's been three Classes added to the SEC.

There's an October 1, '43 through October 31, 1946, and that was part of Petition 57-1; September 1, 1946 through December 31, 1968 for selected area of Hanford, and that was Petition 57-2; an overriding Class was then established from October 1, 1943 through June 30, 1972 for all areas of Hanford, and this Class essentially subsumes the previous two Classes, and this is Petition 152.

Petition 57 requested the SEC Class be continued through 1990. Petition 201, this report, represents the research NIOSH conducted as part of the post-1972 review. The remaining time period, 1984 through 1990, will remain the subject of continuing investigation.

Petition 155, very briefly, I know Arjun spoke about this earlier, remains also before the Board. And this petition essentially deals with petitioners' specific

evidence of accusations by the US EPA of purposeful wrongdoing by U.S. Testing.

Resulted in NIOSH determining that issues regarding quality of bioassay data required further investigation as a separate issue from continuing the Board evaluation of Petition 57, from 1987 through 1989.

The intent of NIOSH's separate evaluation of Petition 155 was to ensure that issues identified with U.S. Testing's non-bioassay analytical programs did not also adversely affect the company's bioassay analysis operations in Richland. SC&A is currently preparing a report regarding this.

So essentially this is an update of activities. The Advisory Board had previously identified three focus areas, americium, thorium, and uranium, as part of Petition 152.

NIOSH prepared a number of draft reports for various nuclides which were used to develop Petition 152 and also to update the TBD. NIOSH continued to focus activities on the post-1972 time frame, concentrating on neptunium, uranium, that is HEU and U-233, and thorium.

Results of these investigation led to a Class proposed by NIOSH in the Evaluation Report for Petition 201, and data gained from additional data captures will be used to update the TBD. The standard sources of information, but I did want to point out here the TBDs, the TIBs. We had 19 additional interviews conducted just for this part of the SEC review.

We now have over 32,000 Hanford-related documents, and we also had ten additional data capture efforts. Even with all of that help and all of that, research at Hanford has been challenging.

Unlike Savannah River, there's not a single contractor for most of this. There are many. There are a multitude of contractors. So changes in contractors and missions often change the entire strategy and the documentation available and even the personnel change.

These challenges have led to focused efforts involving the review of large numbers of classified and unclassified documents. NIOSH and the Advisory Board, with

the support of DOE Richland, have worked to review this complex facility with a view to timeliness and accuracy.

So I'm going to talk about three nuclides. And at the conclusion of Petition 152 for neptunium, NIOSH's research at that point indicated that programs related to neptunium had ceased.

Activities before July 1, 1972, as described in Petition 152, included the Area 200 activities which started very early, May 1, 1948 through June 30, 1972, associated with neptunium-237, crude separation of neptunium from metal wastes beginning in May 1948.

MR. KATZ: Excuse me. Someone on the line doesn't have their phone muted, and we have lovely music, but it's not helpful.

DR. GLOVER: Yes, I think we got put on hold. There we go.

So production of neptunium nitrate in the 200 Area ceased with the shutdown of PUREX in June of 1972.

These are our Petition 152 conclusions. Area 300 saw neptunium work from January 1, 1966 through December 31, 1970,

with target element fabrication and neptunium/plutonium separations continuing into 1970.

Continued research at Hanford led NIOSH to follow a series of activities located in the 200 and 300 Areas involving neptunium operations that were not addressed by Petition 152. These were conducted after June of 1972.

A series of partial material inventories show that neptunium was used by a variety of departments including Metallurgical Development, Chemical Technology and Fuel Design and Development.

Numerous buildings were identified as having continued neptunium operations including -- this is a partial listing, defense-related metallurgical work at 231Z, Fuel Design and Development in 308 Building, research in 325 and 329.

And we had continued entries into the Q and J cells of PUREX, which were the neptunium separation facilities as part of PUREX.

So those were the isolation, where they did the fine cleaning of neptunium to

separate it very purely from the plutonium products.

For monitoring, we saw no bioassay prior to 1972. We had four, only four, in vitro bioassay measurements in the Petition 201 time frame. All were collected on the same day in September of 1972.

We have a single count for neptunium-237 in the Hanford REX database, and that's the radiological database.

So the other nuclide I talked about was thorium, the second nuclide, and so also at the conclusion of Petition 152, NIOSH's research at that point indicated that thorium had ceased.

We were looking at that. We had Area 100, 1965 through '68, where they had fuel element failures. Area 200 they had major thorium campaigns and production of thorium.

Area 300, in the early years, they had long time, from the '45 through '70 thorium operations and the final campaign being pelletized thorium oxide in the 1970 time frame.

And again, continued research at Hanford led NIOSH to follow a series of activities located in the 200 and 300 area that were not addressed by Petition 152.

These included preparation and shipping of 350 tons of thorium to Fernald. This material was left over from the Thorex campaigns and was slightly contaminated with U-233.

This was conducted in 203-A, 241-WR and 204-S facilities. Shipments occurred during the period 1977 through '79, with 33 shipments total is what we believe, and the facilities required cleanup after the material removal.

Other included processes which generated plutonium/uranium/thorium scrap which was sent to LANL. 300 Area work which included reactor fuels research.

We also see a Thorium Oxide Fuel Development Laboratory completed in mid-1979 located in the 306 West Building. Very little data is available regarding thorium monitoring and cannot be tied to operations at the site.

There are only 11 in vitro bioassay

urinalysis results for the element from the period 1972 through 1983. Only one record in 1979, seven in 1980 and three in 1981.

REX database contains 16 in vivo bioassay results for thorium-232 in the time frame. Again, very, very sparse.

So finally, the third nuclide we concentrated on was uranium. Again, our research had pointed out that very little HEU and U-233 work was done by mid-1972.

And, again, we continued our research and found additional activities in the 200 and 300 Area regarding HEU and U-233.

These activities included research by the Nuclear Experiments Group, defense-related metallurgical research at 231Z as well as at 234-5 plant, and likely other facilities.

Research located in the 300 Area including the 325, 303-C, 305, 313, 314, 324, 326, 327 and 333 Buildings. Criticality studies and associated fabrication of HEU for criticality studies in 306 Building.

Hanford monitored workers for natural uranium exposure using total uranium

fluorometric methods as well as lung counting.

At the end of 1983, Hanford implemented and began to utilize methods for the determination of isotopic uranium in urine, alpha spectrometry.

NIOSH determined that it's unable to use natural uranium monitoring from this period to cover the types of work and research being conducted at Hanford during the proposed time frame.

Conclusion from the research: NIOSH has evaluated the available information and determined that it does not have access to sufficient personnel monitoring, workplace monitoring, or source term data to sufficiently estimate potential internal exposures to HEU, U-233, thorium or neptunium during the period July 1, 1972 through December 31, 1983.

So for Petition 201, why the Class? Workers potentially exposed to thorium, neptunium, HEU and U-233 who were not monitored nor does a suitable dose reconstruction method exist.

Several infeasibilities exist

during the time frame in question, and are presented in the form which provides broad coverage to the infeasibility.

Decision was based on the lack of adequate biological monitoring data, sufficient air monitoring information and/or sufficient process and radiological source term data to reconstruct dose with sufficient accuracy.

Why everyone? Based on dose reconstruction experience and records, NIOSH further determined that there is not sufficient information available to enable NIOSH to accurately assess whether an energy employee or Class of employees did or did not potentially enter specific areas of Hanford during the time frame associated with Petition 201.

What about employees not included in the SEC? NIOSH intends to use any internal and external monitoring data and medical dose that may become available for an individual claim and that could be interpreted using existing dose reconstruction processes.

Health endangerment: the evidence

reviewed in this evaluation indicate that some workers in the Class may have accumulated chronic radiation exposures through intakes of radionuclides and direct exposure to radioactive materials.

Consequently, NIOSH is specifying that health may have been endangered for those workers who were employed for a number of work days aggregating at least 250 work days within the parameters established for this Class or in combination with work days established for other Classes in the SEC.

So the proposed Class: all employees of the Department of Energy, its predecessor agencies and its contractors and subcontractors who worked at the Hanford site in Richland, Washington, from July 1, 1972 through December 31, 1983, for a number of work days aggregating at least 250 work days, occurring either solely under this employment or in combination with work days within the parameters established for one or more other Classes of employees included in the Special Exposure Cohort.

Just a brief idea of the scope of

the SEC. We have about 4500 total claims of Hanford and PNNL.

PNNL was a contractor who operated facilities at the Hanford site and so their claims are lumped in that time frame at Hanford.

Eight hundred sixty-five of those have been currently withdrawn for the existing SECs. Total number with a DR at DOL is about 4000, 3958.

Number of claims with a presumptive cancer during the proposed time frame, 1522. Number of claims with non-presumptives is 1082. Number of claims at NIOSH with a presumptive cancer is 59.

So those numbers, you know, DOL will have to review those against the rules and criteria.

So our recommendation for the period July 1, 1972 through December 31, 1983 finds that radiation dose estimates cannot be reconstructed for compensation purposes. And we said feasibility no. Health endangerment yes. Thank you very much.

MR. KATZ: Let me just note for the

record that the two Board Members who have conflicts, Ms. Beach and Ms. Munn, have been recused for this presentation and for the discussion too.

CHAIRMAN MELIUS: Okay, questions for Sam. Paul.

MEMBER ZIEMER: Sam, could you clarify the December '83 date? What happened in January 1st of '84 that makes that different?

DR. GLOVER: For many of the activities, the neptunium, a lot of those had finished up operations, the ones we were actually looking at.

Others included the implementation of a bioassay program appropriate for isotopic analysis of the uranium.

And so, beginning at the end of 1983, they've implemented a bioassay method appropriate for use, and also at that point you begin to see a more robust program.

But we had specific concerns on select programs and some of those terminated at the end of '83.

MEMBER ZIEMER: I was a little more

curious as to why it was December 31st. Did these others magically appear on the 1st of January or was this just a convenient cutoff time?

DR. GLOVER: It was a bit of convenience. Essentially we gave it a little bit of time for some of those programs to come into place.

They were implemented more of October of '83, begin to see those to get to use and so it allows all three nuclides to kind of --

MEMBER ZIEMER: Okay, yes. So it's a little fuzzy, but you extended it perhaps a little beyond where it might have actually started. I just wanted to get the rationale and whether --

DR. GLOVER: That is correct, sir.

MEMBER ZIEMER: -- we're going to have another thing beyond '83 that says -- yes.

CHAIRMAN MELIUS: Thank you. Yes, there are issues remaining after '83 that may come up, but I think that, at least from SC&A's work so far, that's a reasonable

cutoff. Is that fair, Arjun, to the extent we've look at it?

DR. MAKHIJANI: Yes, Dr. Melius. You know, as per your instruction, when we knew this was coming down the pike, I did some preliminary work going over our matrix to see whether, you know, this was a good stopping point.

And I will agree that this is a good stopping point. I'm not saying that there won't be issues beyond that, and Sam has indicated it's still up for review.

But for a lot of radionuclides like uranium there's other than fluorometric data. There's quite a bit of data on strontium-90, bioassay data and so on.

And so I think, yes, I think it's a good cutoff date. If you assign it to us, we're ready to prepare a report on the issues for the rest of the period.

CHAIRMAN MELIUS: Okay, thanks. Other questions for Sam?

MEMBER ANDERSON: I'll move that we accept the recommendation for NIOSH to add to the SEC workers between July 1, 1972 and

December 31, 1983.

MEMBER CLAWSON: I second it.

CHAIRMAN MELIUS: Second from Brad, okay. Any further discussion? Yes. Okay. Bill, do you have any? I'm sorry, I forgot to check. Bill Field, do you have any questions?

MEMBER FIELD: No, thank you.

CHAIRMAN MELIUS: Okay, let’s do the roll call.

MR. KATZ: Okay. Anderson?

MEMBER ANDERSON: Yes.

MR. KATZ: Beach is recused. Clawson?

MEMBER CLAWSON: Yes.

MR. KATZ: Field?

MEMBER FIELD: Yes.

MR. KATZ: Gibson, are you on the line? Absent. Griffon?

MEMBER GRIFFON: Yes.

MR. KATZ: Kotelchuck?

MEMBER KOTELCHUCK: Yes.

MR. KATZ: Lemen, are you on the line? Absent. Lockey?

MEMBER LOCKEY: Yes.

MR. KATZ: Melius?

CHAIRMAN MELIUS: Yes.

MR. KATZ: Munn is recused. Poston?

MEMBER POSTON: Yes.

MR. KATZ: Richardson, are you on the line? Oh, no, you are not on the line. Absent. Roessler?

MEMBER ROESSLER: Yes.

MR. KATZ: Schofield?

MEMBER SCHOFIELD: Yes.

MR. KATZ: Valerio?

MEMBER VALERIO: Yes.

MR. KATZ: And Ziemer?

MEMBER ZIEMER: Yes.

MR. KATZ: It's unanimous. All in favor. Two absentee votes to collect. The motion passes.

MEMBER CLAWSON: I would just like to make one comment on this Hanford. I've been involved in a lot of it. So many times we kind of pick at the negative things, but I'd really like to compliment Dr. Glover on the process.

This has been a very, very difficult one and gone for a long time, but his diligence in reviewing the information,

I'd just really like to compliment him on that because this has been a very difficult one.

And I've been involved in probably 90 percent of it but I'd just like to tell him thank you.

CHAIRMAN MELIUS: Well, I would just echo that. I think he actually worked this a little bit more collaboratively than maybe some of the other SECs and also incrementally.

And I think it worked out well in terms of identifying issues, gathering the information, sort of maintaining independence but at the same time addressing this.

And I think it was able to get a lot more accomplished in the time period than if we had done it differently.

Again, appreciate Sam and everyone at NIOSH and for the DOE's cooperation and SC&A's and so I think we were able to move this one along and will continue to do so, but we still have some issues, one more SEC.

And what our plan would be for moving forward now would be, one, as Arjun has mentioned, SC&A's finishing up a report on the

other outstanding, I think SEC 155. Is that the number? I can't remember the number.

I think that's the number for the laboratory issue. That report is just about complete and will need to go through review, but hopefully we'll get that back in time.

And then I think we also would be tasking, and I'll ask for some support, at least for my other Work Group Members, for tasking SC&A to move on and sort of look and identify issues post-1983 that need to be looked at.

I think we would be having a Work Group meeting both for the outstanding petition, the 155, as well as sort of the post- '83 issue.

So we can try to close those, optimistically before the September meeting, but some of that'll depend on reviews and so forth. But I think we can certainly make progress. If not September, certainly the following meeting, then.

We actually haven't had a Work Group meeting for a while because we knew that this 83.14 was in the works and it really

didn't make sense until we had completed that other report and so forth but we'll do that.

I also just want to mention, I thought it was helpful to have a justification in the report on the Class.

I think that's the first time I've seen it in a report, and it's usually something we end up discussing here, getting on the record.

But I think it's important when NIOSH addresses it up front so we're not, you know, trying to figure it out here or asking question.

We still may ask questions but at least it's been addressed to some extent in the report that when we look at it for that. So any other questions or comments on Hanford?

(No response.)

CHAIRMAN MELIUS: Okay. Ted, can you go check? We need to decide whether we launch into public comment. I don't want to break for a long period, but can you look and see who signed up?

MR. KATZ: Yes.

CHAIRMAN MELIUS: Let's do that.

Okay, okay. If you can just be patient with us for a little bit. We were not scheduled to start the next session until 4:30, which is over 45 minutes, and I'd prefer we not have to take a full break until then.

How do the Board feel? Would you like a short break before, a 20-minute break? We could plan on restarting at 5:00 either way. At 4:00, excuse me. And then we can try to move through this. Start at 4:00. So why don't we do this, while we figure out the logistics, why don't we take a 20-minute break and then plan on starting at around 4 o'clock and that should cover us both ways?

(Whereupon, the above-entitled matter went off the record at 3:45 p.m. and resumed at 4:05 p.m.)

CHAIRMAN MELIUS: Okay, if everyone will get seated, we'll get started. Again, a reminder for anybody that's just come in that if you'd like to give public comments, if you could sign up at the desk outside. Just helps us keep people in order and so forth.

MR. FROWISS: Dr. Melius?

CHAIRMAN MELIUS: Yes.

MR. FROWISS: Yes, I'm on the phone and I wanted to make a public comment at the appropriate time.

CHAIRMAN MELIUS: Okay, and who is speaking?

MR. FROWISS: This is Albert Frowiss in California.

CHAIRMAN MELIUS: Okay. Okay, we'll call you. It'll probably be about a half hour, 45 minutes.

MR. FROWISS: That's fine.

CHAIRMAN MELIUS: Because we have other -- it may even be closer to 5:00, depending on how we go, but thank you.

MR. FROWISS: Yes, the comment is about Los Alamos, so.

CHAIRMAN MELIUS: Okay. No, I understand. Yes, we're a little off schedule. So we'll start with a presentation, just for everybody to know, update on the LANL petition.

Mark Griffon, who's head of the Work Group, will be presenting that. And then Board Members may have questions for Mark about that. We may get some comments from

NIOSH at that time.

Then we will be hearing from the petitioner and then we will be opening up the floor for public comment. We'll go through a little explanation on how that goes and so forth.

We will also be hearing from some of your, I guess, Congressional representatives speaking.

And we're expecting Congressman Lujan to speak around 4:30, so we may interrupt for him. He wanted to speak directly and is planning on calling in here about 4:30, so we may be adjusting the schedule as we go along.

So start, Mark Griffon, who's the head of the LANL Work Group.

MEMBER GRIFFON: Good afternoon, everyone. Yes, since we're in the area, we thought it appropriate to do a more full report on the status of our Work Group progress.

This is the Los Alamos Work Group looking at several of the petitions over the last several years.

The Work Group is not coming to this meeting with a recommendation today to add a partial Class, despite some efforts prior to this.

We had a Work Group meeting recently. We're just not at a point where we're going to be able to make a recommendation today.

But we at least want to give you a full update of the issues that remain and sort of our path forward and have some dialogue about that for both the Board and the public and the petitioners.

So the most recent petition that we're working on is 109 and this goes from 1976 through 2005. We had an Evaluation Report issued by NIOSH as is noted also quite a while ago, 2009.

In the meantime, we've had four Work Group meetings and the last one, I don't remember the exact date but it was in May, just recently.

And there's also been quite an effort on the on-site visits, worker interviews and data capture.

And in part, what slowed us up from the last time to this point was some questions on getting access to data at LANL. I know NIOSH had some hurdles to overcome in that regard, so that slowed down their progress a little bit.

These are the prior SEC petition evaluations. Just to refresh all of our memories where we've been, we did designate the early Class '44 to '63, another overlapping time period, '43 to '75, and then '43 to '75. These are three separate petitions but we did qualify all those.

And the last one just shows this one is still the one we're working on. That's the active petition from 1976 to 2005.

And this is sort of a listing of the main issues that we are still considering on the Work Group level.

I'm not going to read every line, but the first couple, mixed activation and mixed fission product and the exotic nuclides are probably the three ones that we're grappling with the hardest.

That overlaps with the third item

on there, which is the completeness and reliability of the data, because those first two things on the list count on that data to work for the coworker models.

The one item with regard to neutron exposure, we have accepted NIOSH's response to that.

And then others are more specific regarding specific issues that, some of them were brought up by the petitioner in the petition or in the process of our Work Group meetings, and I'll get into a few of those in more depth in a minute.

Here's this, this just extends that listing on some of the issues that were brought forward by the petitioner and, again, this may have been in the petition or through the Work Group meetings. I can't remember exactly.

There's one little mistake on this slide. The second item shouldn't be closed. I think it should be the third item that's closed.

And, again, we're going to go into more of these. The fourth one down is

environmental exposure models and one of the -- the second one is closed, you're saying? Okay.

The fourth one down is environmental models, and this is of particular interest to the issues of security guards going around everywhere on the site basically, and whether the ambient environmental models adequately would bound their exposures because they're in and around waste sites, different areas.

And a lot of times the ambient models are based on emissions data from the various buildings.

The fire we'll go into a little more in a minute. And then the last issue noted the similarities between LANL and NTS, the campaign-based activities rather than a routine sort of production-based activities.

They had a lot of campaign activities at LANL and the question is whether the way NIOSH is proposing to bound these doses can be done, given that type of work.

So going into some of the major ones with a little more depth, the mixed

activation products and mixed fission products, just to go along with where we've been with this.

NIOSH concluded that by 1976 the in vivo counting methods were well established and the data was available to bound the intakes.

They proposed using cesium-137 for both the activation products and the fission product model at the time.

Subsequent to that, SC&A raised some questions about using cesium and they modified their approach to base it on beryllium-7.

Some remaining issues on this that we have is that the beryllium-7, they have to ratio these things to calculate all the activation products' doses.

And the beryllium-7 ratios are based on the stack emission data and we asked: is that representative of the mix of nuclides that would be at the workplace in the work areas?

So these are questions that we recently raised and NIOSH is still in the

process of answering these. Also, just the availability of the source data. Is there enough data, is on the table as well, and I think this goes on. We just didn't have much information about the emissions data in general, whether it was a continuous or integrated sampling method.

And then who was included in the in vivo program also came up as a sort of remaining issue. Was everybody getting in vivo monitoring that should have gotten in vivo monitoring?

And let's move on. The next big item is the mixed fission products. Again, the cesium-137, they're picking that out as a nuclide that was measured.

And then they're ratioing that to get all the fission product doses. There is a real question here about the amount of usable data and whether these ratios apply.

We're looking at a situation which has non-reactor facilities and the model in the past has been used by NIOSH for reactor facilities, so do we have good information about the appropriate ratios to use in this

circumstance?

And the other thing that's come up during this discussion is that, you know, they weren't able to locate a lot of usable data.

However, they located quite a bit of documentation indicating that from this point forward there was a very robust program and that, in fact, the people that were required to get monitoring were getting the monitoring.

So, you know, this sort of raised some questions on the Work Group as well as SC&A as to, you know, how do you determine if it's robust?

We'd really like to see the data more and examine that a little further than just accepting an operational document that says, you know, we were doing better by this point.

And the status on this is that we've asked NIOSH to go back, basically back to this model, and demonstrate to the Work Group that the intakes derived from cesium are bounding of all the mixed fission products and for all work areas.

And we also want to understand, again, I think I raised this in the first one, understand the criteria for inclusion. Who was monitored through the in vivo and what triggered them to be monitored?

And finally, oh, this is the areas, you know, the various scenarios for mixed fission product exposure.

You know, can you bound it in these different areas, because they could have different radionuclide mixes so the ratios could be different, and we want to know is there a model that can bound the exposures for all these different areas?

Okay, so we have mixed activation products, mixed fission products, two of the big ones that we're looking into.

And I should also say that the prior SEC Class that we added for LANL was in part based on the inability to reconstruct doses for mixed activation and mixed fission products.

So, you know, one argument that can be made is these doses would likely be pretty small but, in fact, we did use this as an

argument to add the Class before, so we're also wrestling with that.

The third big issue is what we're calling exotic radionuclides, and the three big ones, I guess, are neptunium, curium and actinium.

The question here is that the approach that is currently being put forward is to use the primary radionuclides.

I think for the most part plutonium, but maybe uranium and americium, but the primary radionuclide measurements to bound the intakes of these exotics.

So we haven't seen any data for these, neptunium, curium, actinium. They're basically saying that if, you know, we have a lot of data for these others and we think we would have a similar exposure experience that we can use this data to bound the exposures for the exotics.

And, you know, we have some questions about this and whether this would hold for the campaign-type approaches, you know, whether we know exactly.

We've asked for sort of a history

of where these exotics were used, what areas, what time periods and whether this model would actually hold true, so we're sort of asking for a proof of principle on these exotics.

And here's just some of the further actions in that regard. And the petitioner actually pointed out, and it's in the transcript, the petitioner pointed us to a few reports of interest on this topic that NIOSH has also agreed to look into.

And again, I listed those three but we want to ensure that the approach would bound all exotics.

The completeness issue, this sort of overlaps the mixed activation products, fission products and the exotics, the question of the completeness of the data. Is there enough there to do a useful coworker model?

And, you know, again, the thing I'll point out on this slide is that, you know, there seems to be a fallback position here that the third bullet says, "NIOSH indicates that considerable operational documentation suggests 'robustness' of LANL health physics monitoring program to ensure

workers who should have been monitored, were monitored."

SC&A, and I think for the most part the Work Group, feels like we need a little more. We need a little more to support that these models are appropriate and adequate.

Just the operational manual saying that we have a more robust program from this point forward is not going to cut it. We need some proof of principle here.

Neutron exposures, I won't go through all of this. This is one where we've actually, the Work Group has closed this out.

The primary issue was that neutron-to-photon ratios were being used from a later time period for an earlier time period.

We asked NIOSH to look into: did the operations change or would we expect similar neutron-to-photon ratios from the earlier time period as were in the later time period?

They gave us enough evidence that SC&A came back feeling that it was pretty firm that it supported NIOSH's position, and the Work Group agreed with that and we closed that

one issue out.

So I think those first three were the really primary issues. Some of these other ones get a little more specific, not that they're less important but they're more specific to certain areas or certain issues.

This one is outside the LAMPF/LANSCE accelerator facility. There was a question about worker doses from this retention pond.

And really I think we're close to closing that out. I think NIOSH has put forward a reasonable argument. We just asked them to write it up, basically.

But I think, Joe, if I'm not overstating that, I think SC&A's, we've sort of agreed that they can probably get there but we're still waiting to see their report on that, so. Joe's not nodding in agreement but, anyway.

Another outstanding issue is special tritium compounds. We've heard this from several of the sites today. We have not really opened this up to much of an extent.

The question, as always, on this

is: we want to find out under what parameters the tritides were used, whether there was a likelihood for exposure and if we can bound that exposure.

And when I say parameters, if they were doing certain things with the tritides that would likely make them airborne or there's a potential for exposure.

How likely was there an exposure pathway? And we want to know sort of what tritides? Where were they used? So we really need to look into that issue a little more.

And this goes back to the support service personnel and there's a question about the drop-off in bioassay at the later date and whether a coworker approach is going to be bounding of these workers.

A lot of the support service work, they were doing very different things and getting possibly exposed to very different source terms than the monitored workers, who might have been working in glove boxes or other more specific tasks.

The support service workers could have been out and about the site in different

waste areas.

So how do you translate bioassay data that might have been from workers in glove box areas to workers that were around the site in various areas? And that's what we're wrestling with.

And also, there's a question of what was the rationale for the bioassay data dropping off in the later years?

You know, obviously the criteria or the policy must have changed. How did the site evaluate that, and was it an appropriate call by them?

And then, this may overlap a little bit with my earlier list, but finally we have several petitioner issues that have been raised during our deliberations and within the petition itself.

And at the bottom are some of those. I may have missed a few. Andrew can probably help me out when he presents if I missed any.

But exotics at the firing sites. Again, this is a question of the model, of the coworker model. Would these people working out

in these more remote areas be bounded by the existing bioassay data, with the models that are being used?

The Cerro Grande fire has come up with quite a bit of discussion on that and I think we still have some existing action items on that for NIOSH to go back and look at some of these issues.

One concern that the petitioner has and some on the Work Group have, is the representativeness of the monitoring.

They had area air samples, certainly not lapel samples, not individual air samples for the workers that were involved in this.

There was also some evidence that the filters were clogging, and how were they handled? How were they monitored during that? How were they, you know, calculating the amount of airborne activity?

Was it appropriate to then calculate the individual doses or at least bound the individual doses? So we have a few remaining actions that NIOSH is following up on on that.

And here is the last one, yes. So I think this is the final one, the Cerro Grande fire, and I think that's it. That's a highlight of it.

But if I can summarize, the primary ones we've been looking at lately on the Work Group are the mixed activation products, the mixed fission products and the exotics and then, for all those, whether there's sufficient data that they can make a coworker model to bound exposures for unmonitored workers. So I think that's it, yes.

CHAIRMAN MELIUS: Okay, Board Members with questions, and I've got two questions.

One, sort of the same issue we talked earlier about with Fernald. It seems that we're going down the road of developing a possible, or NIOSH is, a coworker model.

But if you remember, if you go back to the last time we visited LANL, I think NIOSH had decided that even though our first two approvals were based on specific areas and so forth that it really wasn't feasible to place people within those areas at the site,

so it's extended to the whole site through '75, I believe is the date.

And so my question here is: are you looking at that issue also? It may be fine to come up with a theoretical sort of feasible coworker model.

But it's not practical to apply that if you can't place people into the coworker model and if you lack enough information on where they worked and what type of work that they did.

And it seems to me that spending a lot of time on sort of the technical side is not going to be useful at all if you're not able to place that.

So is the SC&A or the Work Group looking or NIOSH looking at that particular issue?

MEMBER GRIFFON: Well, I think there's two things. We're questioning whether the coworker models would be valid, because these are site-wide coworker models and they're going to be applied to everyone, but would it be valid to bound certain unique areas or segments?

CHAIRMAN MELIUS: Right, that's one question. Second question is, well, if you can't put people into those areas, it can be valid for that or it can be, you know, theoretically valid for particular types of work but if you can't put people into those jobs or tasks, then it's not --

MEMBER GRIFFON: Yes, I think the question has been raised on the, I mean, you're trying, kind of say on the flip-side if, for instance, exotics were only used in certain areas but we can't figure out who was in those areas.

I've asked the question. I know I have. I'm not sure if I got a good answer but do we assign exotic exposures to everyone, you know, at the site? And we haven't really, I don't think we've got an answer on that one.

CHAIRMAN MELIUS: But we've certainly already concluded that through '75, that it wasn't able to place people within areas.

Now, again, this may be a little bit different post-'75 but certainly that was NIOSH's conclusion when they, I mean, because

I think DOL was having problems implementing the two earlier petitions.

And secondly I think we had, I think pretty compelling testimony from a number of the security personnel the last time we were out there that pointed out the inadequacies in their monitoring program, particularly in response to emergencies and so forth.

And, again, I think that underscores some of the problems with any sort of model you try to put them in, if they weren't monitored during what could have been some of their higher exposures.

They're already looking to a number of their potential exposures but, again, if they weren't monitored, I don't see where we're going to get very far with them, yes.

MEMBER GRIFFON: Yes, I mean, we certainly have, you know, we have been kind of letting it play out because NIOSH has been continuing to look for data.

I think just the discussion on Hanford raises some thoughts in my mind about, you know, for example, the exotic model.

They're assuming plutonium can be used to bound all these other exotics.

Well, why wasn't that proposed for Hanford? I mean, presumably you have quite a bit of bioassay data at Hanford.

Are they that different? And what's the different circumstances that you could say for LANL we can use plutonium to bound these other exotics, but for Hanford we were unable to?

I mean, I'm not sure I know that answer but it certainly raised a question in my mind about that, yes, so.

CHAIRMAN MELIUS: And then my follow-up question is on -- I guess it's as much for NIOSH. Have we solved some of the delays, problems getting data from LANL? I mean, is that --

MR. HINNEFELD: Yes, my information is that the things that we owe from the last Work Group meeting do not depend upon additional data capture. That's my understanding.

CHAIRMAN MELIUS: Okay, so we're up to date on information?

MR. HINNEFELD: Yes.

CHAIRMAN MELIUS: It wasn't clear from all the reports that were given. That's why I was --

MR. HINNEFELD: Yes, my understanding is that there is not a remaining data issue with Los Alamos.

CHAIRMAN MELIUS: Okay. Okay, thank you, Stu.

MEMBER GRIFFON: And my understanding is that there's almost a -- because we've asked about the exotic and is there data, and I think there is an acceptance from NIOSH's standpoint that we haven't uncovered it yet.

We don't think there is enough data to use, for example, for neptunium so we need another approach which they're defaulting to this plutonium approach, yes.

CHAIRMAN MELIUS: But it seems to me that we sort of fall into this path where we keep looking and looking for different approaches.

And at some point, if it's possible, can we focus on what are the major

potential infeasibilities in terms of doing dose reconstruction?

Again, if the solution is develop a coworker model, if you're not going to be able to place people in that coworker model, you know, why develop the model? And that type of thing, and I think that needs to be evaluated, so anyway.

MEMBER GRIFFON: I don't disagree with that.

CHAIRMAN MELIUS: Yes, I know.

MEMBER GRIFFON: There has been a little bit of a moving target for the Work Group because approaches have been changed. But, yes, the clock is running and I think it's -- yes.

CHAIRMAN MELIUS: Yes, at least I and other Members of the Board I think are frustrated with this and I know people at LANL even more so. Brad.

MEMBER CLAWSON: Basically, Mark, you brought up my question that I had, especially dealing with Hanford in its condition with the other nuclides, these exotic ones.

I can't believe that we've tried to build a model and then be able to try to place people there. What we found out in Hanford, you couldn't really do it and that's why we went the direction that we did.

And now all of a sudden, and I don't think these sites are that much, I just -- and then to be able to place people in there, it's not a good thing.

MEMBER GRIFFON: I think NIOSH, because we made a note of that, probably can look into that for us.

CHAIRMAN MELIUS: Yes, Dave.

MEMBER KOTELCHUCK: It adds a further complication that there are already three approved SEC groups.

I mean, the transition from if you were in one of the last time period groups and then the next time period group you try to stratify in these coworker models as opposed to everyone, it would feel unfair to the folks who are in that fourth group.

And so that's not to say that it's wrong but there has to be a feeling of equity among all of the groups that we decided.

CHAIRMAN MELIUS: Or a rationale why things changed, yes.

MEMBER KOTELCHUCK: Yes, or a good rationale, yes.

CHAIRMAN MELIUS: Any other Board questions? Okay. Okay, I think we'd like to hear from the petitioner.

I don't believe we know whether Representative Lujan is on the line yet? You haven't heard?

(No response.)

CHAIRMAN MELIUS: Okay. Just want to make sure someone's paying attention, that's all. Okay. So, Andrew, yes.

MR. EVASKOVICH: Good afternoon. I'm Andrew Evaskovich. I'm the petitioner for LANL Support Services workers.

I'd like to thank you for coming back to New Mexico and listening to the members who have showed up that want to present their points of view on this issue. I'm grateful that you're here and I'm sure that they are too.

Even though we haven't reached a decision yet, I hope that what they have to

say as well as what I say will influence opinion.

Let me begin by referring to this model or method that they're trying to develop.

NIOSH has developed a method to reconstruct dose for LANL workers and it's going to be based on substitute data and the hierarchy of data to assign dose for exotic radionuclides.

And the hierarchy consists of personal monitoring data, secondly coworker data, third area monitoring data and fourth is source term.

Let me talk about personal monitoring data first. The Evaluation Report states, "LANL clearly possessed capabilities to conduct bioassay measurements for these exotic radionuclides; however, specific data for such measurements are very sparse and generally unavailable."

And to continue with this, in 1991, the Tiger Team found that LANL was failing to effectively identify workers for whom bioassay is required under DOE orders.

In 2011, HSS, that's the division of Health, Safety and Security at the Department of Energy, found that methods used at LANL to enroll workers in bioassay programs are not sufficiently developed to ensure requirements are met. So we're looking at 20 years of basically the same problem.

Coworker data is going to be based on common radionuclides. The uptake amounts for commons will be substituted for exotics. The Evaluation Report says this.

Although LANL maintains a ready ability for targeted in vitro measurements, bioassay data are generally unavailable.

In the absence of bioassay data, intakes of neptunium-237 could be bound using coworker data approach for plutonium-239.

Notwithstanding, a 2005 HSS inspection report as part of the findings said this, "Specific controls must be put in place to ensure the appropriate neptunium bioassays are performed following workplace events involving neptunium, because the standard plutonium bioassay would be ineffective at detecting or quantifying neptunium intakes."

This report states, in addition to bioassay concerns, "There are also potential inadequacies in the assessment of neptunium airborne contamination from instruments designed and calibrated for plutonium."

Does it sound like plutonium bioassay could be applied to neptunium? Likewise, when the same problem exists for all the other exotic radionuclides.

Equally important, NIOSH has proposed using a ratio of beryllium-7 to activation products to reconstruct dose for activation products released from TA-53. NIOSH agreed to validate the ratio using air monitoring data.

Now, in the '90s, after the Clean Air Act lawsuit against LANL, audits were conducted at LANL and the first audit revealed an issue of the ability of filters to capture beryllium-7 efficiently.

If the presence of beryllium-7 is under-reported, how will this affect the ratio validation?

Let me talk about contamination surveys. In 1991, the Tiger Team had findings

concerning contamination surveys, and in 2005 HSS inspection had findings concerning radiation surveys.

You could see the details of these findings in the reports I sent to you, selected Tiger Team's concerns and health physic procedures and source terms.

The Tiger Team, there's a lot of information in there that goes to the robustness of the health physics program. And I think the Tiger Team report shows that it's not that robust or at least it wasn't in the '90s.

And if you look at these later reports that I presented, they also show that there are problems with the robustness of the program.

Let me talk about source term data. If you glance at the Clean Air Act audit report, you will see the LANL filters may not be thin enough to prevent self-absorption. As a result, gross alpha counting accuracy is uncertain.

I also included in my petition a listing of potential release sites and areas

of concern for the LANL RCRA permit. The list describes hundreds of places at LANL that have contamination.

Many only have a chemical or metal releases, some have radioactive materials and a few are not characterized at all.

Here is a sample of the radioactive releases, but let me begin by telling you the report says that further investigation is required to determine if they pose a threat to human health and the environment.

In TA-0-030(d), Septic System. They had neptunium-237, plutonium-239/240, uranium-235.

TA-0-030(h), another septic system. They have neptunium-237, plutonium-239/240 and U-235.

The report also says that analytical data obtained from the MRAL are unreliable and may only be used as screening-level data. This site is under investigation.

TA0-030(n), another septic system. Type of release, plutonium-239/240 and polonium. These were detected above background and the extent of the contamination

is not defined.

Now, if you look at Table 5-1 of the Evaluation Report for SEC 00051 which is for LANL '43 to '75 and they refer to this in Evaluation Report 109, you'll see that it states that there are no radionuclides in TA0. So that's an error that I found there.

TA-2-011(a), Storm Drain and Outfall. Types of release, cesium-137, strontium-90, technetium-99, cobalt-60 tritium, uranium and isotopic plutonium.

TA-3-007, Firing Site. Type of release, bismuth-211, -212, -214, cesium-137, lead-212, -214, radium-224, thallium-228 and thorium.

TA-4-004, Soil Contamination. Type of release, it says radionuclides and they're not specified.

TA-9-012, Disposal Pit. Type of release unknown. The report says, “given that no investigation has been conducted, the nature and extent of contamination has not been defined.”

And I raise this issue because the last time you were here one of the guards

mentioned that they held an exercise in this area and they found out later that it was a hot dump.

TA-15-001, Surface Disposal. Type of release, uranium, radionuclides not specified and other unknowns.

TA-16-005(m), Chemical Pit, Decommissioned. Type of release, uranium, depleted and enriched, radium, cobalt, strontium-90 and barium.

TA-20-003(b), Firing Site. Type of release, strontium-90, radionuclides, uranium-235.

TA-35-14(g)(3), Soil Contamination. Type of release, radionuclides, nature and extent of contamination is not fully defined.

C-36-001, Containment Vessel. Type of release, it only says radioactive materials. There is little or no information about this site. That's in the report.

TA-42-002(a), Former Structures. Type of release, radionuclides and it lists americium-241, cesium-137, lanthanum-140, plutonium-238, 239, tritium, uranium-235 and unspecified fission products.

TA-50-001(b), Waste lines and Manholes. Type of release, acidic radioactive liquid waste, caustic radioactive liquid waste and industrial radioactive liquid waste.

Potential contaminants of concern exist at this site. The nature and extent of potential contamination has not been investigated.

NMED, New Mexico Environment Department, asserts the permittees cannot assume there is no unacceptable risk because neither a human health or ecological risk assessment has been completed.

If NIOSH is going to use coworker data, then it must establish that the workers shared a common radiation environment.

In its discussion points, NIOSH said all alpha activity was done in a glove box. What are the commonalities of a glove box worker and, say, a plumber working on a septic tank in TA-0?

NIOSH will say that it is claimant-favorable because the glove box worker would receive a higher dose, but without knowing the extent of the contamination of the site, how

can NIOSH subjectively say that?

Worker monitoring checklists. NIOSH has said that the development of the health physics checklist will enable them to reconstruct dose for exotics.

Inspection report of 2005 declares the site standard bioassay program and TA-55 health physics questionnaire are only designed to account for plutonium, uranium, americium and tritium.

NIOSH has said the checklists were required for new hires, rehires, transfers and film badge requests. This excludes programmatic changes.

In 1991 there were Tiger Team findings concerning the health physics checklist and in 2008 there was an HSS finding concerning enrollment in the bioassay program.

As far as well-documented health physics procedures, NIOSH says that the health physics procedures at LANL will enable them to reconstruct dose.

In 1991 there were Tiger Team findings concerning the health physics program. In 2002, 2005, 2008 and 2011 there

were HSS findings concerning the LANL health physics program.

CHAIRMAN MELIUS: Andrew, could you try to wrap up relatively soon?

MR. EVASKOVICH: Okay. Let me talk about how NIOSH has applied their method. We just talked briefly about circularity, which basically is Catch-22. If I can read from that, and then give a dose reconstruction.

"There was only one catch and that was Catch-22, which specified that a concern for one's safety in the face of dangers that were real and immediate was the process of a rational mind. Orr was crazy and could be grounded. All he had to do was ask; and as soon as he did, he would no longer be crazy and he would have to fly more missions."

That's from Catch-22.

Let me read you a dose reconstruction statement. The diverse operations at Los Alamos National Laboratory included less commonly encountered materials.

And individuals involved in basic research may have been exposed to intakes of secondary radionuclides without corresponding

bioassays.

During the period of claimant's employment, targeted bioassay methods were available for these radionuclides, and since no records of these bioassays were present in his files returned by DOE, his potential intakes were assumed to result from exposure to plutonium. So that's how NIOSH is currently handling exotic radionuclides.

I'm not saying that they can't reconstruct dose accurately ever for LANL, but the problem is the records haven't been presented. I don't think the data is sufficient in order to support the model they proposed.

We're waiting for an answer. These people out here are waiting for an answer and I think the answer is to add a Class to the SEC for LANL workers. Thank you.

CHAIRMAN MELIUS: Thank you, Andrew. Okay, now we'll go into official public comment.

Okay, I believe that we have Representative Lujan on the phone.

CONGRESSMAN LUJAN: Congressman Ben

Ray Lujan.

CHAIRMAN MELIUS: Okay, go ahead. This is Jim Melius, the Chair of the Advisory Board and we're waiting to hear from you so.

CONGRESSMAN LUJAN: Mr. Chairman, I appreciate your time today and thank you, Dr. Melius, for allowing us to call in.

I really wanted to be in New Mexico for this but, sadly, we have votes this week and so it doesn't allow me the opportunity to be in New Mexico.

But we want to thank you for taking the time to be in New Mexico and, again, I regret that I'm not there in person.

However, I especially appreciate the opportunity to call in and speak with you on the important issue of the Special Exposure Cohort Petition, SEC 00109.

It's my understanding that the lack of action over the last three years on this petition is due in part to NIOSH's inability to obtain data from LANL, Los Alamos National Laboratory, to support the premise that dose can be reconstructed using substitute radionuclides for reconstruction.

But, Mr. Chairman, my concerns are this, is that I believe it's time to draw up the substitute data and move on to another type of methodology to perform the dose reconstruction so that action upon the petition can finally be taken.

As you're aware, many of my constituents have been negatively affected by the inaction of this petition by NIOSH.

And these workers have contributed to the safety and security of our nation and as a result have seen their health negatively impacted by their work.

This petition recognizes the sacrifice that these workers have made and provides them with the compensation that they deserve and it's long past time to move forward on this petition.

And, Mr. Chairman, I do have a letter that's been prepared that I'm going to ask my District Director Jennifer Catechis, who is present, to give to you.

But included in that I have some separate questions that I hope may be able to be addressed this evening or down the road.

Since May of 2008, what are the number of Part B claims for LANL workers post-1975 that have been denied so that we can get an idea of how many people have been negatively affected by the NIOSH inaction on this petition?

And what is the anticipated remaining timeline for NIOSH to take action on this petition?

And when can people expect to know if their SEC 00109 is approved or denied? And what will it take for NIOSH to make a final decision?

Mr. Chairman, I know that you're there and that you guys work so hard with this but, you know, this has been going on for so long, beyond the timetables associated for approval.

Even when this petition evaluation was prepared back in February of '09, it was a full 180 days past the required deadline to do so and we still haven't taken action and here we are at this time period.

So, Mr. Chairman, as you can see, we're very concerned. A lot of people in the

district have told me that they just feel the federal government is waiting for them to die to wait them out.

And I don't know how to answer that question when we're not able to get action here with this case in Los Alamos when other labs have been able to resolve this rather quickly, when NIOSH working with other labs has been able to resolve this quickly.

So, Mr. Chairman, you can see that this is impacting people's lives and I know that that's why everyone on the Board accepted the challenge, the appointment associated with the responsibilities with NIOSH and I understand that you have to use the evidence-based information to make this decision.

But when the information or the data that we need to make decisions is not coming in or is not being provided, we need to find other methods to be able to remember that it's real people that we're talking about here.

So, Mr. Chairman, I appreciate the opportunity to be able to share that with you, to provide you that statement in addition to a

letter that's been prepared for this evening and if there's any questions I'd be happy to address anything at all.

CHAIRMAN MELIUS: Thank you and we appreciate and share your concerns. We did learn a little bit earlier that NIOSH now has all of the data that they believe they need from the Los Alamos site so they should be able to move ahead.

And our discussion here earlier, just before your comments, were trying to see what we could do to expedite and move this forward and as quickly as we can now.

We agree that over three years is a long time and we're trying to get it settled as soon as we can but --

CONGRESSMAN LUJAN: We appreciate that, Mr. Chairman. And, you know, if there's any way to get a timetable associated when we can expect that decision, that would certainly be appreciated so that we can begin to plan accordingly to get ready for whatever is needed to get ready for.

CHAIRMAN MELIUS: Well, when we respond to your letter, we will include a

timetable.

CONGRESSMAN LUJAN: Thank you, Mr. Chairman, I appreciate that and taking the time to be able to listen and visit with our constituents who I know that are there.

And they all have personal stories that I couldn't even begin to describe to you, Mr. Chairman, so thank you for being there and willing to listen to the people of New Mexico and for getting something done on this issue.

CHAIRMAN MELIUS: And thank you for taking time from your busy schedule in Washington to speak to us.

CONGRESSMAN LUJAN: Thank you very much, Mr. Chairman. My best to everybody there and my prayers are with all the families that are represented there as well.

CHAIRMAN MELIUS: Okay, thank you.

CONGRESSMAN LUJAN: Thank you, sir.

CHAIRMAN MELIUS: Okay. So we'll now go into the public comment session, but as part of that, Ted has to get the list and he will also give a set of instructions so you understand that.

And if you just arrived and you

didn't sign up and wish to provide public comments, if you could please go to the desk and sign up. It just helps us keep people in order and so forth.

MR. KATZ: So before we get started on public comments, just to let you know the ground rules in terms of the record of what you say.

Everything in these Board meetings is transcribed and posted for the public. These reports go on the NIOSH website and everybody can read them.

So just to let you know, your public comments are recorded similarly and anything you say about yourself that might be very private will still end up in that transcript just as you say it.

And the only exception to that is if you talk about someone else, a third party, that information will be redacted to the extent to protect that person's privacy so that people who are not representing themselves here don't find their personal information out there in the public without their consent.

So that's the basic ground rule. There's more specifics to it that can be read on paper that's on the back table there.

And as well for people who are on the phone line, on the NIOSH website under the meeting section there's some paragraphs explaining this, what's called the Board's Redaction Policy.

But again, that's all meant just to protect people's privacy where they can expect it and to let everyone else realize that when you're speaking about yourself that you're accepting that your privacy is shared with the public.

CHAIRMAN MELIUS: Okay, and we have a number of people signed up and we're going to go a little bit out of order here to get one person in who requested. Lois Rael.

MS. RAEL: Thank you, Mr. Chairman. I had major surgery ten weeks ago so I appreciate that you can bump me up a little bit.

My name is Lois Rael and my maiden name was formerly Miestas. And I was fortunate and very lucky at the age of 21 to

get my first job at LANL.

I was paid $8.32 an hour at that time and that was quite a bit of money. I met my husband soon after I started work there and we moved to Santa Fe. I'm formerly from Espanola.

And we decided that instead of me driving back and forth every day it might be best for me to take the commuter van, which was called SECA.

I do want to mention that the lab has provided many prestigious jobs to the Espanola valley and the surrounding communities and it's been a pleasure, I'm sure, for all of us to be employed there and very proud of it.

In 1981 an employee of the metallurgy facility, Building 29, Technical Area 3 was exposed to plutonium.

He left the building without following the proper protocol and, yes, he drove a van home that evening and I was one of his passengers.

I still hear the little knock on the door. I want to share a story with you.

I hear the knock on the door that evening, the day after.

These men in white clothing came to the door. My husband answered. They asked for me and they were all dressed in this white clothing, masks, feet and all were covered.

They asked me to retrieve the clothing that I was wearing on that day. They put it in bags, took it and I never heard from them again.

Was I ever monitored? No. Was I ever swabbed or urine samples? No. It was like they just disappeared. I never got the clothing back and needless to say that I heard about the accident by reading about it in the newspaper.

In 2008 I was diagnosed with a very rare cancer. It's called angiosarcoma, cancer of the spleen. There's only about 150 to 200 cases of that type of cancer in the entire United States.

At that time I had surgery. They removed my spleen and following up after that I did chemo.

Well, I talked about this little

story back when, I think you guys were here about two years ago down at the Hilton downtown?

CHAIRMAN MELIUS: Correct, yes.

MS. RAEL: Thank you. And I did speak a little about it. For those of you that are Board Members, I thought you'd want to know a little bit about the background on that.

Since then, things have changed. In August my cancer metastasized to my liver. My claim, original claim was denied.

I've completed the 16 weeks of chemo and the whole right lobe of my liver ten weeks ago was removed with cancer. During the surgery, they also bruised my ribs.

And the other thing that I wanted to mention is that I also have now a support letter from Johns Hopkins in favor of my case which has been resubmitted.

I'm not complaining. I'm thankful for what I have, not for what I don't have. I have my faith. I have breath today. I'm thankful for every day that I wake up.

I have my family. I have my

grandson that's 16 months old and another one due in August. I've learned to live each day as it's given to me, and actually it's each moment.

I've learned not to judge people by the way they look on the outside because you never know what's going on on the inside.

I look at the moments that I can't have, like my grandson reaches out and I can't hold him because I had this major surgery. There's been days when I can't visit him because he's running a fever or he's got a runny nose and my immune system was jeopardized.

These are people. Like Congressman Lujan mentioned, we are people. We are here to fight for what's happened to us.

Thank you so much for your time and I appreciate if you reconsider my claim. Thank you.

CHAIRMAN MELIUS: Thank you for sharing with us.

MS. RAEL: One more thing I guess I forgot to mention, which is probably one of the most important. During this chemo

treatment, I've lost most of my vision, and it's caused by the cells that the chemo, it eats, and I don't know if I'll get it back.

Would you like a copy of the Johns Hopkins report? It's on file. I mean, I've submitted it for my claim.

CHAIRMAN MELIUS: Yes, actually, if you could share it with the Board too I think would be useful.

MS. RAEL: Thank you.

CHAIRMAN MELIUS: Yes, thank you. And, again, thank you for being willing to share that stuff and best wishes to you. Next person, Harriet Ruiz.

MS. RUIZ: Dr. Melius and Board Members, thank you so much for your time. I am a former State Representative and a former SEC petitioner.

I stand before you very frustrated, as you can hear in all the voices that you're going to hear, also the one from Weldon, that Andrew's petition, particularly for Los Alamos, is taking so long.

The woman who just spoke would have been compensated under his petition, and I'm

sure many others would.

Under my petition, so many people did get compensated. I get phone calls and it just is such an uplifting thing to validate, to validate their work.

I just am a little bit angry and very frustrated, and I just know you work really hard. It isn't all on you.

I know it goes down to NIOSH, LANL releasing of documents and stuff that we're not privy to, and also the claimants aren't privy to. The SECs actually relieve them, and you know that, from that burden of proof.

So I just wanted to express my frustration and anything you could do to speed along this SEC would be greatly appreciated. Thank you for your time.

CHAIRMAN MELIUS: Thank you, again, for taking the time. Michele Ortiz.

MS. JACQUEZ-ORTIZ: Good afternoon. Thank you, Chairman Melius and Members of the Advisory Board, for allowing time on the agenda to share a statement on behalf of United States Senator Tom Udall.

Earlier this year, the Senator

submitted a request for the Advisory Board to consider holding its meeting in New Mexico when the Special Exposure Cohort Petition submitted by Andrew Evaskovich would be discussed.

Thank you for considering the Senator's request and for your decision to meet here in Santa Fe to hear directly from LANL claimants and their families as you continue your review of the LANL petition.

As you know, NIOSH received the LANL petition on April 3, 2008 and it qualified for evaluation on May 29, 2008.

Even though it's been four years since the petition was submitted, the petition's progress has been slow.

The Senator is aware that the Advisory Board's LANL Work Group, along with the Board's contractors, have put a lot of time and effort into evaluating the petition.

One reason, as claimants have shared with our offices, for this lack of progress is a lack of sufficient data from LANL for NIOSH to consider in its evaluations.

The lack of access to relevant data

is a common refrain in recent LANL Work Group meeting minutes.

For example, there are several notes in the May 2011 minutes in which the Work Group posed questions to NIOSH and the agency responded that it would be necessary to go back to the site and verify the information.

Yet it's not clear that NIOSH was able to get this information from the site. As a result, the LANL petition remains in a state of limbo.

At what point should the Advisory Board weigh in when NIOSH lacks access to or cannot get access to sufficient data to accurately reconstruct dose?

In years past, Senator Udall has expressed his concerns to the Advisory Board about the issue of timeliness.

Congress is relying on the Advisory Board to ensure that the petitioner's right to a timely evaluation is not compromised.

Congress also placed within the Advisory Board's purview the tough job of evaluating the scientific validity of dose

reconstruction practices and methodologies, including the use of substitute data.

LANL is a unique facility in the DOE complex and the Advisory Board should carefully examine to what extent substitute data is a claimant-friendly evaluation tool, especially in light of LANL's historic work with exotic radionuclides.

The Senator encourages the Board and its LANL Work Group to press the issue mentioned by Dr. Griffon during his Board presentation: specifically, can the robust health physics monitoring program that NIOSH cites be scientifically validated?

To declare the monitoring program robust is one thing, but NIOSH needs to prove it. If the information doesn't exist or can't be accessed, if NIOSH is not able to demonstrate that it can accurately reconstruct dose or if NIOSH cites a data monitoring program that's scientifically indefensible, the Advisory Board can, in its capacity and the power given to you by Congress and the President, approve the SEC for LANL.

It's been four years since the

petition was filed. These workers deserve the benefit of the doubt. They've been waiting long enough and it's time to move forward on a decision.

Senator Udall realizes the difficult task the Advisory Board has in considering the complex issues associated with this program. He understands the hard work and long hours each of you commit as Members of this important Board and he thanks you for considering these issues as you move forward on the LANL petition.

CHAIRMAN MELIUS: Thank you, Michele. Again, just to clarify, there certainly have been some difficulties due to access and receiving information.

As I understand it now, NIOSH does have all the information that they feel they need to be able to move forward with the reports that they need to do and I think DOE has confirmed that, so thank you. Sammie Hayes.

MS. HAYES: Hello. I have been here --

CHAIRMAN MELIUS: Welcome, or

welcome back I should say.

MS. HAYES: Pardon?

CHAIRMAN MELIUS: Welcome.

MS. HAYES: I'm not too well with these things.

CHAIRMAN MELIUS: Okay.

MS. HAYES: But anyway, thank you for hearing me, Mr. Chairman and Board Members.

In listening to the Work Group presentation and people listening around here, I have one question. What the heck is the matter with the Los Alamos petition?

We have waited. I could have gotten a bachelor's degree in the four years it's taken for this thing to be approved or to be disapproved.

You have information. You have data. You have been provided with data that you should be able to make a decision on. NIOSH is just waltzing around and you're dancing to their tune, which is ridiculous.

It's time for you all to take your job and do what you're supposed to do and tell NIOSH enough is enough. I'm too frustrated to

say anymore. Thank you.

CHAIRMAN MELIUS: Thank you. Next person I have is Joni Arends. Jennifer, did you want to make -- oh, okay, then, excuse me, let Jennifer.

(Off microphone comments.)

CHAIRMAN MELIUS: No, that's okay. Come on up and do the letter. I thought it was just a placeholder for the Representative. That's why I was skipping over.

MS. CATECHIS: No, I was just going to submit the letter which restates what the Congressman mostly stated there. So if that's easiest for you if I just submit the letter and that's all you need, then I'm good.

CHAIRMAN MELIUS: That's fine or you're welcome to read it into the record if you'd like.

MS. CATECHIS: Okay.

CHAIRMAN MELIUS: Yes, that's fine.

MS. CATECHIS: “Dear Dr. Melius, I wanted to take this opportunity to thank you for coming to New Mexico, for allowing me the opportunity to offer a statement for the record and for allowing me to call into the

meeting earlier today. I send my regrets that I could not join you in person.

I write today in strong support of SEC 00109 regarding Los Alamos National Laboratories. I would like to highlight the history of the SEC with the Board today.

The original petition was submitted in April of 2008 and qualified for evaluation in May of the same year.

The petition evaluation was finally prepared and submitted by NIOSH in February of 2009, a full 180 days past the required deadline to do so.

Since February 2009, NIOSH has taken no further action on the SEC, creating a full three years of inaction on the part of NIOSH regarding this particular petition.

It is my understanding that the lack of action over the last three years is due to NIOSH's inability to obtain data from LANL to support their premise that dose can be reconstructed using substitute radionuclides for reconstruction.

After this significant delay, it is time to drop the substitute data and move on

to another type of methodology to perform those reconstructions so that action upon the petition can finally be taken.

Many of my constituents have been negatively affected by the inaction of NIOSH on this petition. These workers have contributed to the safety and security of our nation and as a result have seen their health negatively impacted by their work.

This petition recognizes the sacrifices these workers have made and provides them with the compensation they deserve.

It is long past time to move forward on this petition. Sincerely, Representative Ben Ray Lujan."

CHAIRMAN MELIUS: Thank you very much. Joni Arends, please.

MS. ARENDS: Good afternoon, Members of the Board. My name is Joni Arends and I am the Executive Director of Concerned Citizens for Nuclear Safety.

CCNS formed in 1988 to address community concerns about the proposed transportation of waste from Los Alamos

National Laboratory to the Waste Isolation Pilot Plant, which at that time was being proposed.

I want to thank you first for meeting in New Mexico. I want to encourage you to move on with the SEC petition that's the subject of these public comments.

CCNS has been working on LANL issues for almost 25 years and we find that the issues that were raised today are significant.

We think that they put forward that it's infeasible to conduct a dose reconstruction for these folks and that, as you have seen, there's a toxic cocktail at LANL.

It's radionuclides, it's hazardous materials, it's toxic materials, it's PCBs, it's exotic radionuclides, it's hazardous materials.

As we say, LANL has used every single element in the periodic table to see if they could be used for nuclear weapons.

Since LANS, the Los Alamos National Security, LLC, came on board in 2005, the

public has had trouble getting data from LANL.

Before 2005, it was a more open situation. Now, we have a gatekeeper for the public that we have to go through in order to obtain documentation.

While they'll say that they've provided all of the information, we know from our experience working with CDC on the Los Alamos Historical Document Retrieval and Assessment Project that there were delays with that project.

The first and second phase were supposed to take less than a year or two years. It actually ended up taking ten years to get all of the necessary data to be able to go through the first couple of phases, and then we don't even know if the researchers obtained all of the information.

So this access to information is an ongoing struggle for not only you and the NIOSH, but also for the public.

I want to talk about our experience with the permitting at LANL as evidence in support of the SEC petition and specifically for the firefighters and for the security

folks, the people that aren't necessarily in facilities that are moving around.

In 1994, CCNS sued the Department of Energy for violations of the rad NESHAP 40 CFR 61 Subpart H.

And as a result, Judge Mechem in 1996 said that 31 of the 33 stacks that LANL was monitoring from their radionuclide facilities were out of compliance with the Clean Air Act.

That means that the mixed activation products, the mixed fusion products, the exotics, the tritium and the beryllium were not being measured properly. That was 1994.

We have found that since the Clean Air Act audits finished in 1998, we're still experiencing problems.

For instance, under the Title V Clean Air Act permit that the New Mexico Environment Department has issued, they're not reporting the beryllium emissions from a significant facility, the Sigma facility.

And we're going to have to go back and look at what emissions are coming out of

the Sigma facility, which is a main beryllium facility.

I want to talk about neptunium and the problems that we've experienced with neptunium.

In 2007/2009 time frame, the National Academies of Science came out and did a report on the protection of groundwater, the plans and practices of groundwater monitoring at Los Alamos National Laboratory.

And at that time, we were complaining about the data that was reported in the draft Site-Wide Environmental Impact Statement for LANL.

We were complaining because it said that there were high levels of neptunium in the Buckman Well Field, and the Buckman Well Field provides water for Santa Fe and it's on the east side of the river.

And what we did is, we raised questions. Is the neptunium really there or are they using the wrong analytical methods?

And we complained about it and the NAS wrote about it in a paragraph and I will bring these copies of these documents down

tomorrow. I didn't have time today to prepare them.

The NAS said there's a problem, because DOE is presenting this data to the public for review and comment, but they're not using the right analytical methods for neptunium in our drinking water.

And even though that complaint was made, not only by CCNS but the National Academies of Science, DOE published that data in the final Environmental Impact Statement.

They published it in the final Environmental Impact Statement. They didn't go back and correct it. They didn't do re-analysis. They didn't look at what analytical method they had used for neptunium.

This is just one of the issues. You know, we could talk about chromium. We could talk about tritium. We could talk about a lot of different analytes that they're not using the right analytical method.

And recently, or it's not even recently. At the standards here, in many cases, there'll use an analytical method that will have a result that's higher than the

standard so that they can say “no detect.”

So when we see a lot of no detects in their Environmental Surveillance Report, which is an annual report, or we see it in an environmental impact statement, we ask questions.

Are they using the right analytical method? We have to go back, as NIOSH has probably done, go back and look. What detection limit are they using? This is a problem for us.

I have two more examples. I would like to talk about the Cerro Grande fire. I would like to talk about the fact that during the fire in May 2000 the air monitoring equipment was shut off because of electricity concerns about sparking more fires.

And this has been a topic of contention for 12 years, about what really happened. So we're not able to say exactly what the firefighters were exposed to.

I can say that when I was up at Los Alamos during that fire, I saw firefighters from the volunteer fire departments or from our area, from Taos clear around down to

Galisteo.

They had no protective equipment. They had no respirators. They didn't even have dust masks. And this was criminal.

Later that summer, the fire started at Idaho, the fire started at Hanford. And we called our colleagues around Hanford and around Idaho.

And we said, get your guys, your firefighters, to at least get bioassays before they go in to these fires. They have to have some kind of equipment so that they're not breathing in these particulates from these areas.

The second point about the Cerro Grande fire is that TA-16, TA-15, they burned three times during the fire. The fire went across, it came back, it went across, it came back, it went across as it was heading toward Area G.

The burns were different magnitudes. There were some very hot fires. There were very low-intensity fires over this area.

Recently the New Mexico Environment

Department has raised concerns about the levels of dioxin and furans at the firing sites and has asked LANL to go back and look at the level of sampling there.

We believe that all of these issues that I've raised indicate that you can't do a dose reconstruction, that we have to move forward with something else for these folks.

We support what Senator Udall has said. We support what Representative Lujan has said in terms of moving forward.

People are suffering, and I know that you hear this all over the country when you're doing your work, but people are suffering and people are dying.

And however you can move forward with this petition, it needs to be done as quickly as possible. Thank you.

CHAIRMAN MELIUS: Thank you. Mark, does the Work Group or SC&A have the NESHAP report? Yes, okay. I just wanted to -- okay, thanks. Next person I have is Reverend Holly Beaumont.

REV. BEAUMONT: Mr. Chair, Members of the Board, I'm the Reverend Holly Beaumont.

I'm Director of Interfaith Worker Justice, New Mexico, which is a state-wide advocacy organization that stands with and advocates for workers and their families.

I've lived in New Mexico for 25 years at the foot of the Pajarito Plateau and was surprised as I began to work with Joni Arends and Las Mujeres Hablan how easy it is for all of us to move to New Mexico and slip into this state of denial about this industry up on the hill that has essentially held the people of northern New Mexico hostage now for decades.

We see the results of that unhealthy relationship here in just a small microcosm of the sum toll that it has taken on the communities of northern New Mexico.

We are at our wits' end at how to persuade those in decision-making positions to do what is right.

As I wrestle with what it is that continues to delay this process, I realize that to a certain extent in order to act on behalf of these workers it requires lifting the veil of denial from your own psyches and

to acknowledge that what you are about at LANL, whether it is a direct relationship or as this relationship, is to handle and work with deadly chemicals and substances that are designed to kill human beings and that, in order to create those weapons, you are required to expose human beings to those substances and to figure out how to contain them and store them and that far too often your very best efforts, assuming that they are best efforts, have come short and failed and have released those substances into the environment and exposed generations of families here in northern New Mexico.

So as a person of faith, I beseech you to do what must be done in order for each of you to find your own peace in being a part of this industry of death.

And I am reminded of Dr. Martin Luther King, who is so often quoted, but one of his most famous statements was that justice delayed is justice denied.

And he made that statement about people who I believe in many ways had striking parallels to the workers who have stepped

forward here today, those who have spoken, those who are named and those who simply wait, that there is a system here that has the ability and the resources to do the right thing for these people and, for reasons that are only fully known to you, continue to withhold that compensation and those resources and to find justification within your own minds for making those decisions again and again.

So we stand before you as people of conscience and people of faith imploring you to bring that to an end and to move ahead, providing justice and compassion for those who deserve it and who will not rest until they receive it. Thank you.

CHAIRMAN MELIUS: Thank you. I believe that there was somebody on the telephone who wanted to speak about LANL.

MR. FROWISS: Yes, Dr. Melius.

CHAIRMAN MELIUS: Okay, thank you.

MR. FROWISS: Can you hear me?

CHAIRMAN MELIUS: Yes, we can. Can you identify yourself first for the court reporter?

MR. FROWISS: Yes, my name is Albert Frowiss. I'll spell it for the record. It's F-R-O-W-I-S-S, Box 909, Rancho Santa Fe, California.

And I appreciate all that you do. I attend most of your meetings by phone, some in person.

I'm a private advocate for SEC claimants all over the country and I've done probably 250 claims for LANL and Sandia in the last year or two and I run a lot of newspaper ads in the local New Mexico papers for public outreach.

My questions today are really not for your Board but they relate to LANL and probably for others at the meeting, DOL or DOE people.

I had two questions. The first one, and I'm sorry that it's just a minor detail relative to all the eloquent remarks that have been made already.

But I'd like to know why it's taking so long, typically 90 days, for the point of contact for LANL to get normal EE-5 employment verification for LANL employees.

These are requests that don't even involve DAR requests. They're just simple employment verification requests. And so that's one of my questions.

I think Mr. Lewis mentioned earlier that the LANL point of contact person is at your meeting.

The second question that I have is really probably a DOL policy issue and that is regarding Technical Area 0 in the current SEC. There's been nobody that's seemed to be able to define whether this area includes the school, the lodge, et cetera. And so I think there are people in Washington, D.C., at the policy office who are still struggling with that.

And I just wonder whether any enlightening remarks can be provided in this forum today. Thank you very much.

CHAIRMAN MELIUS: I don't know if there's anybody here that can answer those questions now? Greg may. Greg Lewis from DOE is here.

MR. LEWIS: Yes, this is Greg Lewis with DOE. I'd be glad to talk to him directly

but I do not believe our numbers show that it's 90 days for employment verifications. I believe we're much faster.

I mean, I don't know if there are specific employment verifications he's talking about but I think our average is much faster than that but I'd be glad to discuss, you know, with him directly.

CHAIRMAN MELIUS: Yes. Sir, if you want to contact either through the point of contact or directly to DOE headquarters, they'd be able to, I think, follow up on that.

MR. FROWISS: I'll do that.

CHAIRMAN MELIUS: Okay. And I don't believe anybody here is from DOL and I suggest you follow up directly with DOL headquarters also on -- usually the people that handle sort of facility definition issues don't attend our meetings so.

But we'll mark it as a public comment and make sure there's follow up on this for you.

MR. FROWISS: Thank you.

CHAIRMAN MELIUS: Thank you. Is there anybody else here who signed up for

public comment or didn't sign up for public comment and wishes to speak?

DR. MERRITT: There's someone on the phone.

CHAIRMAN MELIUS: Okay. Are you speaking about LANL or --

DR. MERRITT: Yes.

CHAIRMAN MELIUS: Okay. You go ahead and then I've got a couple of people here who want to speak but go ahead and identify yourself first, please.

DR. MERRITT: This is Dr. Maureen Merritt. I'm a retired occupational medicine physician.

And I've been involved with issues regarding LANL and the EEOICPA as an advocate and authorized representative for approximately the last seven or eight years.

I've worked with a number of the people that have spoken to you today, in fact, and I've done a lot of research myself over the years and I'd like to speak briefly about the SEC petition 00109.

I've reviewed the Tiger Team reports, the LAHDRA report which just came out

in its completed form not even two years ago.

I've done extensive research through the NAS and other scientific bodies and publications, all in the interest of helping sick claimants through the EEOICPA process, most of who have had to go through dose reconstructions.

And I have to say that after all of this and being on the Advisory Committee of the Cold War Patriots, which is a national nonprofit with approximately 8,000 members now, and being a founding member of New Mexico Alliance of Nuclear Worker Advocates and being instrumental in setting up the first state Office of Nuclear Worker Advocacy, I have to say that I believe that dose cannot be reconstructed accurately for the time period in question.

I've looked into it very carefully as I know the petitioner and others have. And the fact that it feels that the 180-day rule has been circumvented to the point where, if we're going on nearly four years, it's just a travesty.

And as Holly mentioned, justice

delayed is justice denied and I believe the Board really, respectfully, I request that they act on this petition as soon as possible. And, of course, my hope would be to see it approved. Thank you very much.

CHAIRMAN MELIUS: Thank you. Is there anybody else on the line that wishes to make comments about LANL?

Okay, now I saw at least two hands in the audience so whoever wants to go first. And when you come to the microphone, please identify yourself for the records.

MR. MARTINEZ: Chairman, gentlemen, ladies, my name is Cirilio Jake Martinez. I'm from northern New Mexico, Hispanic, born in Espanola.

I worked for LANL for 31 years as a mechanical tech at TA-53 and also as an environmental technician. I did a lot of things for the lab. You know, I'm proud to serve my country with LANL.

But a lot of the things that I did there were not monitored right by my supervisors.

We did a lot of chemicals, freon,

acetone, tripropylene. I don't know how to pronounce it very well. But we would use our bare hands, no plastic gloves or anything like that.

We'd work overtime to do shielding over at TA-53 at Area G, I'm sorry, TA-53 and we'd move hundreds of lead bricks with no gloves or nothing, you know, on overtime.

And naturally when you're young and you're raising a family, you try to get the overtime that you can, and at that time I think I was making like $2.50 an hour as a technician, okay?

There was also the switchyard where we would go in and we would maintain the vacuum on the accelerator machine. Sure, they did experiments to help human beings.

They had targets. They had, you know, like 10-foot instruments with detectors at the end of these ten-foot and they couldn't even read the readings. It would peg the meter. These were targets.

And we would go in there and they would get dosimeters to put on our shirts and sometimes they would peg and they would say

that we dropped them or that it wasn't an actual reading.

So they would in turn, say, okay, we're just going to give you, you know, it's not a right reading. You know, it was up to them, you know, and so we agreed to that.

Then at one point what happened was TA-53 got into some financial trouble so I decided, okay, well, I'm going to go into the environmental field. So I got lucky and I knew some people there and I got into the environmental field.

When I was in the environmental field, I did drilling and it was related to sampling and we did core sampling for all types of nuclides that were in the ground.

Tritium, at TA-54 I remember drilling. I was the actual driller. We would drill shafts 120 feet to find out if the plume of tritium would be traveling.

They never gave us respirators or anything like that. The only thing that they ever gave us was a little air sampler that they would put over maybe about five feet from the actual hole, and that was it.

And we never got told if we were exposed to anything. A few times I lost my clothes because the readings were so high we weren't able to take our clothes home.

And then also at different sites, the firing sites, I worked at different firing sites because -- well, that was my drilling experience.

And then I transferred over to the environmental group which were the air quality group and I did air quality monitoring.

And with the air quality, we went throughout northern New Mexico. We served all the northern New Mexico pueblos. I was in charge of representing the northern New Mexico pueblos with all the air sampling.

I maintained the vacuum pumps. I did the tritium, the particulate matter, collected the particulate matter. I went to every single site that EPA mandated that we should monitor so I was involved in all that.

I was also involved in the Cerro Grande fire, okay, as a technician that was called in from home. While everybody else was home, was called in to monitor.

I was not given a respirator. I was not given a radio. They were more concerned on picking up the filters, the particulate matter filters, which is 47 millimeter in diameter, and the particulate matter.

A vacuum pump is pulled on the back end of that particulate matter of that filter and then the particulate matter gets picked up on that filter.

So they were more concerned about that than the safety of the worker. They just said, hey, go out there. Go do it. Go pick it up.

The command post was in White Rock. Our office was at TA-54. They call it the kiva now. At that time it was called the cave but now it's called the kiva or cave, either one.

So we were asked to drive from White Rock to the cave, pick up all of our equipment and go out into the field and put out these samplers. When I got there, some of these samplers were actually off.

The reason why they were off was

because the vacuum pump, once it fills that filter, it's not going to run anymore. So either the pump would go out or the breaker would trip.

And I'm not saying that all of them did that but I know a few of them did that and at different locations, not at one location but at different locations and we were out throughout the whole lab.

I remember seeing the firefighters there and I spoke to some of them, some of them which have gotten cancer right now, that do have cancer, and I was by them.

Also I remember at the TA sites, some of the firing sites, I was out there. I would walk up to the site and I would see the fire and it was in different colors.

I would walk up to the sampling station which is a little birdhouse, okay? It's probably maybe 36 inches by 36 inches square and we have all our instruments in there.

And we would sample for tritium and we would sample for the particulate matter and that was because of EPA mandates. Whatever

EPA mandated, that's what the lab sampled for.

So as I would walk up to these stations, we'd have these wooden pillars that we would anchor these samplers to. They would be on fire.

But yet, like I said, they were not concerned about us. They were concerned about the filters, bringing in the filters. And again, like I said, I'd like to emphasize this, some of those stations were off.

They were not monitoring at the time that the, you know, the fire was there. I was there. I collected some of these filters where some of these machines were not on, which mechanically they did what they were supposed to.

They were collecting the particulate matter but once they got overloaded, I mean, the pump either burned or they tripped the breakers.

And since then, since 2000, I've had a tumor removed. I can't sleep at night. I have severe sleep apnea. I have some growths coming out of my hands.

I mean, like this lady said

earlier, you know, I hope that you make a decision and you help us before we die.

You know, money to me does not mean anything. It's that medical expense that will cover me in case I do get sick.

Maybe not today but in the future if something comes up from the sampling and what I did for our country and LANL will be able to help me. What am I going to do with $250,000 if I'm dead?

So please make that decision and make that decision for all of us, not just for me, for all of us. Thank you.

CHAIRMAN MELIUS: Thank you.

MR. FUENTES: Good afternoon, Members of the Committee. My name is Jerry Fuentes.

I worked at Los Alamos National Laboratory from 1978 to 1985. I analyzed plutonium-238 oxide. I analyzed americium, neptunium. We did thorium. We did all of these radionuclides that we analyzed.

The bottom line was I was ingesting quite a bit of this radiation, this plutonium and all these other radionuclides.

We had these open front boxes called wet chemistry boxes and we'd be working analyzing 238 or 239 or whatever weapons grade it was.

And the air would shut off and you would have all this particulate emissions come out and just drench you with plutonium and with all those small particles that were in there.

You had to get out and you had to decontaminate your own lab and you had to change your clothes if you were wearing, you had to always where your lab smocks. That was one thing that happened.

Another thing, I was working with the gentleman, the first lady that spoke here. He took the plutonium home with him. He contaminated the whole Wing 3 of TA-3, a CMR Building.

He contaminated me also. They had to go to my house and decontaminate my house and the bar that I was having one beer at also.

After that, then they took us back in and we had to decontaminate the Wing 3 that

was completely, totally contaminated with 238. Then they sent us in there again.

And so I just have to say that the monitoring at Los Alamos left a lot to be desired.

I currently have two cancers right now. Thank God they're in remission, but I have two cancers and it came probably from there. Nobody in my family has cancer and now I have two cancers, multiple cancers.

If this occurred at Los Alamos, they would never monitor you if you worked with uranium fuel rods. I worked with uranium fuel rods. They didn't care about that. They thought that it wouldn't give you enough radiation or it wouldn't bother you.

But when it came to plutonium, they allowed you to self-monitor, but not with uranium. They would not allow you to self-monitor. These are my experiences there. Thank you very much.

CHAIRMAN MELIUS: Thank you for sharing that with us. Best wishes to you. Yes.

MS. MACE: Good afternoon. My name

is Cari Mace. I'm the President of the International Association of Firefighters in Los Alamos, Local 3279.

I'm here because we support this and we support it because it's a small part of the bigger picture for us.

When we come to work, we have the potential of being exposed to any number of things, any day of the week. Right now there's 37 personnel at LAFD who can respond.

And knowing that we can go anywhere, anytime to have something in place to help out the brotherhood, knowing that my brothers and sisters are going to be protected if they get sick because I already have brothers that have cancers from working at LAFD.

I have several friends that are retired now from LAFD who have dry coughs from the fire. It's very personal for me because I work by these guys every day and I see their families.

And I know that if they get sick that they would hope that LANL would have something in place to help them, so this is

just a small part of the bigger picture for us as well.

And I'm sorry for the individuals that are sick. It's the potential is always there and we know what we do when we show up to work because we understand the risks that we're taking every day when we come to work.

But we're also hoping that if we do get sick that there's something there to help us out. Thank you.

CHAIRMAN MELIUS: Thank you. Anybody else that would like to make public comment? Yes, Danny.

MR. BEAVERS: Mr. Chairman, my name is Danny Beavers. I'm a business representative for the plumbers and pipefitters and I currently represent about 150 pipefitters in Los Alamos.

And I'm not here just to speak for them or not to speak for myself but, you know, over the years we've represented thousands and thousands of construction workers there.

Many of them have passed away. Many of them are too sick to come. Some of them have given up hope that this would ever

happen.

I spoke two years ago in support of this petition and I'm here to do so again. I mean, these people went to work up there. They didn't question. They did their jobs. Many of them became ill from that.

And I think it's time that the Board and NIOSH and whoever else move forward with this and give them an answer for the ones that are past 1975 on the last SEC. There are still a lot of people who this would affect.

There was a lot of people got paid when the last one passed. A lot of people got medical. And I think it's just time that it's done. With that, thank you.

CHAIRMAN MELIUS: Thank you, Danny. Anybody else that would like to make public comments? Okay, anybody else on the telephone line that would like to make public comments?

(No response.)

CHAIRMAN MELIUS: Okay, if not, again, thank everybody for coming out. We appreciate your information you provide us and is really helpful and helps to move this process along and keep us accountable also, so

again thank you all for taking the time.

(Whereupon, the above-entitled matter was concluded at 5:52 p.m.)