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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108th MEETING

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WEDNESDAY
NOVEMBER 18, 2015

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The meeting convened at 8:15 a.m., Pacific Time, in the Waterfront Hotel, 10 Washington Street, Oakland, CA, James M. Melius, Chairman, presiding.

PRESENT:

JAMES M. MELIUS, Chairman
HENRY A. ANDERSON, Member
JOSIE BEACH, Member
BRADLEY P. CLAWSON, Member
R. WILLIAM FIELD, Member*
DAVID KOTELCHUCK, Member
WANDA I. MUNN, Member
GENEVIEVE S. ROESSLER, Member
PHILLIP SCHOFIELD, Member
LORETTA R. VALERIO, Member*
PAUL L. ZIEMER, Member*
TED KATZ, Designated Federal Official
REGISTERED AND/OR PUBLIC COMMENT PARTICIPANTS

ADAMS, NANCY, NIOSH Contractor
AL-NABULSI, ISAF, DOE
ANIGSTEIN, BOB, SC&A*
BURGOS, ZAIDA, NIOSH
CRAWFORD, CHRIS "FRANK," DOL
MCKEEL, DAN*
FITZGERALD, JOE, SC&A
FROWISS, ALBERT*
HINNEFELD, STU, DCAS
JESKE, PATRICIA*
JONES, WANDA, HHS*
KINMAN, JOSH, DCAS
LEWIS, GREG, DOE
LIN, JENNY, HHS
NETON, JIM, DCAS
PADILLA, JUDY*
REAVIS, RICK*
RUTHERFORD, LAVON, DCAS
STIVER, JOHN, SC&A
TAULBEE, TIM, DCAS
YUNDT, SCOTT
ZINK, BRIAN*

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

T-A-B-L-E O-F C-O-N-T-E-N-T-S

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

(8:19 a.m.)

CHAIRMAN MELIUS: If everyone could get seated, we'll get started. And welcome to the 108th meeting of the Advisory Board on Radiation and Worker Health. And to start us off, Ted.

MR. KATZ: Thank you, Jim. Welcome, everyone. Let me just say a few precursory things. Welcome to the Advisory Board.

For everyone who's listening in from elsewhere, the materials for this Board meeting, the agenda and all the materials that will be discussed, are posted on the NIOSH website under the Board Section under Meeting Dates, today's date, so you can follow along there with the presentations. Pull up any of those presentations there.

As well, the agenda has on it a Live Meeting connection, so for those of you for whom Live Meeting works, you can join by Live Meeting and see the slides of the presentations. As they're projected here, they'll show there as well.

Another thing for folks on the phone, please keep your phones on mute except when you're addressing the group and mostly that will be the Board Members except during the public comment section and the SEC sessions. And if you don't have a mute button, press *6 to mute your phone and press *6 again to take your phone off of mute.

And, please, nobody put their call on hold but hang up and dial back in if you need to leave the call for some time.

So there's also I'll note, although I'll note it again later because probably people who would be paying attention aren't right now on the line, but we have a public comment session today and I believe it begins at, yes, at 5 o'clock, 5 p.m. So if you plan to give public comment, you should plan to be on the line at 5:00 when we start that session.

Let me start with the Board roll call and the way I'll do this, we have today, for today's roll call, we have, let's see, only one site that relates to conflict of interest so I'll just

address that and then we can run through roll call without the Board Members individually addressing conflicts.

So let's begin roll call with the Chair.

(Roll call)

MR. KATZ: And with respect to conflicts, we are dealing with today later in the afternoon Idaho National Laboratory, and for that, Mr. Clawson has a conflict and he will recuse himself when that session comes up.

And with that, it's your meeting, Dr. Melius.

CHAIRMAN MELIUS: Okay. Thank you and we'll start with an update from NIOSH, Stu Hinnefeld.

MR. HINNEFELD: Good morning, everyone. Is my mic on?

MR. KATZ: Sounds like it. Folks on the line, can you hear Dr. --

MR. HINNEFELD: Mr.

MR. KATZ: -- Mr. Hinnefeld?

(Multiple yes)

MR. HINNEFELD: Okay, great. Well, I'm here to give my normal update presentation. Yes, I'll start with some -- what I normally do is program news items and I always like to cover our outreach activity.

Since our last Board meeting, we've attended outreach activities in association with some other members of the Joint Outreach Task Group which are DOE, DOL, and then the Ombudsman for DOL and our own Ombudsman participate in that group.

One of those activities was a trip to West Valley, New York, for the -- well, the reprocessing site up there, West Valley site.

And then also a stop in Ashtabula or in the vicinity of Ashtabula, Ohio, for the extrusion plant in Ashtabula, couple covered sites.

In conjunction with our outreach contractor, ATL International, we held a dose reconstruction and SEC workshop in Cincinnati in September where we invited representatives from around the country, a number of local union officials and some program advocates, and

representatives of others, interested parties in the program, for a two-day workshop where we covered dose reconstruction and SEC process in a little bit of detail.

There's also, in case anyone is interested, the Department of Labor is in the process of selecting the membership for their Advisory Board on Toxic Substances and Health. That is essentially what we call the Part E Board, which was established by the most recent, or about a year ago now by legislation about a year ago and --

(Off the record comments)

MR. HINNEFELD: They can't hear me? Am I too far from the mic?

MR. KATZ: Are people on the phone having a hard time hearing Mr. Hinnefeld? Hello?

(Off the record comments)

MR. HINNEFELD: Okay, I'll pick up where I was on outreach activities and we have covered West Valley, New York; Ashtabula, Ohio; and then we've done a workshop, dose reconstruction SEC

workshop in Cincinnati in conjunction with our ATL International outreach contractor.

Also last night, since we were in the vicinity, we went out to Livermore to have an outreach that was sort of briefly arranged. It was just us. LaVon and I went and two of our contractors from ATL International.

I think there were about 15 people there and we gave them a presentation about the program, you know, the law and our role in the law. Pretty well received. Interested crowd, asked some interesting questions.

So those are essentially our outreach activities since the last when I was talking about the membership on what we call the Part E Board, which is the Advisory Board on Toxic Substances and Health.

And then also, in trying to improve our communication skills, we invited an instructor to come and provide a day's training in plain language communication of technical information or of scientific information, and this was not just for

our staff. This was a NIOSH, several NIOSH staff went to this.

I think it's a fact that we'll continue to write documents that are scientific in nature and, therefore, written for the audience they're written for.

There are still some things you can do in terms of good sentence construction and good language choice to improve that communication even though you're writing scientifically.

And there may be a path, an avenue, if we want to write for claimant community, advocate community, sort of a non-scientific reader because many of our -- well, many of our claimants are scientific but many are not. We would perhaps write a summary for a general reader as opposed to a scientific.

We wouldn't do that on all our products but maybe certain selected ones where we suspect there would be interest. We haven't really embarked on that yet. I'm toying with the idea of taking a shot myself if I ever find time to do that.

We also, in association with Joint Outreach Task Group and along the lines of plain writing, we are participating in a subgroup of that organization to revise letters, brochures, and tri-folds, some of the information that they've developed, to make that a little more reasonable for the public.

Some of it is pretty good and some of it I don't think is very good. There are some things even I can recognize can be redesigned on some of those.

During this time period, we had the opportunity to go capture some data that was collected by Dr. Thomas Mancuso from the University of Pittsburgh.

Dr. Mancuso died a number of years ago and many of his records were being retained by a law firm in Pittsburgh, and one of the lawyers had sort of grown up with Dr. Mancuso, built much of his career with Dr. Mancuso, and he has kind of been watching over this information that Dr. Mancuso had stored there with the thought that maybe it would

be useful someday.

Well, there were some logistics issues with the law firm. They weren't going to have room to store all this information anymore and so he was looking for a home for the information.

And he called David Michaels actually. David Michaels knew about us and our program. David Michaels is the director of OSHA now. He worked for the Department of Energy while this program was being established.

And Dr. Michaels called Dr. Howard who called me and, as a result, things kept moving downhill and Dr. Neton went on the data capture with our contractors to Pittsburgh to look through information there.

We're not 100 percent sure -- we've actually captured quite a lot of documents that we'll scan and include in our available records. We're not exactly sure if they're, you know, of utility right now, but we didn't want to let the opportunity go by. We had a, I think it was an end of October deadline and the facility was going to

be closed and the records were going to be gone.

So I'll make a very brief mention of budget items because I don't really have a whole lot of news there.

You probably all heard the news stories back at the end of, whenever it was, that Congress has agreed to a two-year spending -- they called it a two-year budget but what it really was was a two-year spending plan, you know, a plan for a budget.

In other words, it was not an appropriations bill so we don't really have an appropriations bill yet. I mean, the government is still only funded through December 11. They need to pass appropriations bill to have money beyond that. Most of government does.

Our particular money doesn't expire. Unlike much of the government, our money doesn't expire at the end of the fiscal year and we will have some money left over that we can continue to work if worst comes to worst and Congress can't decide how to pass an appropriations bill, but

that's where we are now.

In terms of amount, that two-year budget deal, a news stories account that said there was some relief from sequester in this two-year deal but none of that really comes to us, so we will continue at our sequestered level for Fiscal 16, assuming everything goes as planned.

I had one other news item that I didn't include on my slide because I didn't know about it when I prepared my slide. I wasn't sure about it.

One of our staff members, Sam Glover, has accepted another position in NIOSH and is going to be a branch chief in one of the other divisions in NIOSH. So in about three and a half weeks, he'll be transferring over to another division.

He'll still be in our building. We can still track him down if we need to and we're going to work on turnover between now and then to turn over the sites he's been the lead on for some of our other staff and we'll keep people informed as that goes in terms of how we're going to apportion that out.

And then the last item that I wanted to speak briefly about, and I think we may have another person on the phone who can assist in some of this, is the administrative review of Electrochemical Corporation, Hooker Electrochemical SEC.

As you recall, you know, we recommended at Hooker that a SEC was not warranted. You, the Board, concurred and made that recommendation to the Secretary denying the SEC.

The petitioner asked for administrative review, which went to the Secretary and then, well, what happens, the Secretary impanels a panel to hear that.

This particular review panel felt like there had been an error made in that determination and recommended to the Secretary that a Class be granted after all.

And so the Secretary did acquiesce with the review panel and so that Class now has been empowered, is effective now. The Class has become effective.

I believe Dr. Wanda Jones, who is the

Principal Deputy Assistant Secretary for Health in the Office of the Assistant Secretary for Health at HHS, might be on the phone and may have a little bit to say about that. Dr. Jones, are you there?

DR. JONES: Yes I am, Stuart.

MR. HINNEFELD: Do you have some comments to provide to the Board about the process or about what transpired?

DR. JONES: Sure, and thank you for the opportunity to be here to present to the Committee today. I really want to acknowledge the Committee's work and I'm grateful that we have an opportunity because this has been an interesting case.

As Mr. Hinnefeld just indicated, the Secretary did recently issue a new designation for the Hooker Electrochemical Special Exposure Cohort.

My office, the Office of the Assistant Secretary for Health, is providing this very brief update to the Advisory Board regarding the EEOICPA, the Act of 2000, and the SEC administrative review

process specifically.

We have put a very comprehensive FAQ document explaining the details of the administrative review process on the NIOSH DCAS website, and I won't be reiterating that material today but it's there for your reference, for the public's reference as well.

But what we'll update here is information about the process in general and then a few details specifically related to the Hooker Electrochemical Corporation review so, Mr. Hinnefeld, is that going to meet your needs?

MR. HINNEFELD: That's fine for me. We'll see what the Advisory Board -- if they have comments or questions about it.

DR. JONES: Okay. Well, let me proceed through what I have and we had some high points we want to be sure that we made and then we'll take the questions.

The ability for petitioners to obtain an administrative review of a final decision is governed by regulations at 42 CFR, Section 83.18.

Petitioners may challenge the Secretary's final decision to deny adding a Class to the SEC or a Secretarial decision making a health endangerment determination by requesting an administrative review of the decision and submitting a written request to the Secretary of Health and Human Services within 30 calendar days of receiving the notification letter from NIOSH.

The administrative review request should describe the substantial factual errors or substantial errors in the implementation of the procedures that are set out in the EEOICPA SEC regulations at 42 CFR, Part 83.

The regulation provides that no new information or documentation may be included in the request. The administrative review is limited to the existing record for each petition.

So with respect to the management of the administrative review process, OASH oversees the administrative reviews at the request of the Secretary and I specifically am charged with organizing the process.

So in order to ensure that the panel's deliberations are independent, however, OASH is not involved in any way in their scheduling, their record review, or their deliberations.

OASH assists before the panels begin their work by interviewing and identifying potential scientists with the appropriate expertise for the panel and by collecting the administrative record from NIOSH.

OASH then schedules an initial orientation session with the selected panel members to introduce them to each other, to educate them about the EEOICPA statute and regulations, provide the administrative record, select a chair, and charge the panel with the task of the administrative review.

After that point, OASH is not engaged in the process again until the panel has issued its final report and recommendations.

I'm getting a lot of feedback. Are you all getting --

MR. KATZ: I'm sorry. I'm sorry, Dr.

Jones. We do. We have people on the line who have not muted their phones who may have joined after we discussed this.

So everyone on the line, please mute your phone except for Dr. Jones. Press *6 to mute your phone. If you have a star, press * and 6 to mute your phone, folks.

There's someone talking on the line right now. So, Zaida, can you get them cut off? I'm sorry, Dr. Jones. If you'll just hold a moment, we'll cut that line.

DR. JONES: Of course. Hey, we've all faced this.

MR. KATZ: Thank you.

DR. JONES: Did they cut the rest of us off?

MR. KATZ: No. No, you're still there. You're still there.

DR. JONES: Because I've had that happen too.

MR. KATZ: And it's quiet right now. You might want to just try proceeding while we're

doing that.

DR. JONES: Okay.

MR. KATZ: Thanks.

DR. JONES: Okay, excellent. So a panel of three HHS personnel is responsible for reviewing the merits of the petitioner's challenge.

And recall, because we've had a moment's interruption here, that those personnel are all scientists. They are responsible for reviewing the merits of the petitioner's challenge and the resolution of the issues contested by the challenge.

The panel is appointed by OASH on behalf of the Secretary. The regulations limit the panel to HHS employees independent of NIOSH, and in order to ensure that the process is entirely independent by practice, we have excluded CDC employees, not just NIOSH employees, and that extends as well to the other component that resides with CDC, the Agency for Toxic Substances and Disease Registry. Those employees also are excluded from

participation as members of review panels.

So despite our department's scientific mission that spans basic, applied, and clinical research, public health functions and all hazard preparedness, at any given time, the number of qualified scientists for these reviews is very limited. Because of workloads, international assignments, and for other work-related reasons, only a few scientists are available for EEOICPA administrative reviews at any given time.

And, in addition, the few HHS employees that are qualified and available to conduct the review process must add this work to their ongoing duties so they just have to fit it in.

The process for constituting a review panel is to assemble and charge the panel to review the cases in the order in which the case appeal is received.

The review panels are required to consider the views and information submitted by the petitioners in the challenge, the NIOSH Evaluation Report or Reports, the report containing the

recommendations of the Advisory Board, and the recommendations of the director of NIOSH to the Secretary.

The review panel may also consider information presented or submitted to the Advisory Board and the deliberations of the Advisory Board prior to the issuance of its recommendation.

This may include relevant Board and Work Group or Subcommittee meeting transcripts and other information that comprises the administrative record for the SEC determination.

Now, during its deliberations, the review panel considers whether HHS substantially complied with the procedures set out in the regulations at 42 CFR, Part 83, the factual accuracy of the information supporting the final decision, and the principal findings and recommendations of NIOSH and the Advisory Board.

No timeline governs the review panel's conduct of the review. Each request and review is considered and conducted on a case-by-case basis.

Once the review panel completes its

review, a report of the panel's findings and recommendations is sent to the Secretary. The Secretary will then decide whether or not to revise the final decision contested by the petitioners after considering information and recommendations provided to the Secretary by the director of NIOSH, the Advisory Board, and from the HHS administrative review panel. HHS then transmits a report of the Secretary's decision to the petitioner.

If the Secretary decides, based on information and recommendations provided by the administrative review panel, by NIOSH, and the Advisory Board, to change the designation of a Class or previous determination, the Secretary will transmit to Congress a report providing such change to the designation or determination. HHS will also publish a notice summarizing the decision in the Federal Register.

A new designation of the Secretary will take effect 30 calendar days after the date in which the report of the Secretary is submitted to Congress unless Congress takes an action that

reverses or expedites the designation.

Such new designations and related congressional actions will be further reported by the Secretary to the Department of Labor and the petitioner and published on the NIOSH DCAS website and in the Federal Register.

So with respect to the Hooker Electrochemical Corporation petition specifically, the Secretary's letter to the petitioner, the review panel's final report, and the response to the report from the director of NIOSH are all included in your briefing materials and they're also all posted on the DCAS web page that's dedicated to Hooker.

While I cannot speak to the panel's deliberations or recommendations in this case because, as you recall, I and OASH are not part of that process, I can tell you that the Hooker review panel's recommendation was unprecedented in that it was the first time that a panel has recommended a partial revision. It was not a full revision. It was a partial revision of a prior secretarial

decision.

After considering information and recommendations provided to the Secretary by the director of NIOSH, the Board in its previous submissions, and from the review panel, the Secretary decided to partially revise the prior determination and to issue a new designation for the Class of Hooker employees.

So that gives you an overview of the process that we follow here in OASH in conducting the administrative reviews and a bit of information from a OASH perspective on the decision by the Secretary to partially revise the prior determination. So I'm happy to take your questions at this time.

CHAIRMAN MELIUS: Dr. Jones, thank you very much for, that was an excellent overview of a complicated and long process. Any Board Members have questions, comments? Yes, Dr. Munn.

MEMBER MUNN: Ms.

CHAIRMAN MELIUS: Ms. Munn, excuse me.

MEMBER MUNN: Is it possible for you to

give us a very short summary of what the actual changes were? What portion was reversed in that decision?

CHAIRMAN MELIUS: Maybe Stu can do that.

MR. HINNEFELD: I can do that, Wanda. This is Stu. This is Stu Hinnefeld. I can cover that.

DR. JONES: Yes, that's good. Thanks, Stu, because I don't have the decision right in front of me. I know it's in the record in the booklets for the Committee.

MEMBER MUNN: Fine. I haven't had an opportunity to --

DR. JONES: Of course.

MEMBER MUNN: I didn't know where it was on the web. I think you just told me where and we'll review it further here. Thank you, Dr. Jones.

MR. HINNEFELD: This is Stu Hinnefeld. I can speak to that question briefly. The review panel recommended that a Class be included for the

operational period when there were radiological materials being handled at Hooker, but they confirmed the decision not to include a Class for the residual contamination period.

So the partial reversal was the determination that a Class was not warranted. You know, they recommended the Class was warranted during the operational period when radioactive materials were there because the operational period, as defined on the DOL website, actually starts before the radiological materials arrived. That's because the contract with the Department of Energy was to produce a non-radiological chemical.

And so the contract started earlier than the radiological material arrived and then, so the covered period on the DOE website starts before the radiological material arrived. The radiological material was just to use a byproduct of the chemical production.

So it's from the time the radiological material arrived on site through the end of the covered period is the Class that was added.

CHAIRMAN MELIUS: Any other Board Members have questions of Dr. Jones? Board Members on the line, telephone? If not, thank you very much, Dr. Jones. I know you've got a busy schedule. I don't want to hold you up but we really appreciate you taking the time and making the effort to present this and talk to us about this. Thanks.

DR. JONES: Dr. Melius, thank you very much for the opportunity and best wishes to the Committee for a joyous Thanksgiving.

CHAIRMAN MELIUS: Okay, you also. Thanks. Very good, thank you. I would just add to it. I think it's, you know, fair to say this is not a, this kind of review does not set a precedent for the Committee. These are independent reviews that are done.

I think what it does underscore is what we repeatedly say and I try to repeatedly remind everyone, it's very important that we establish a full factual record of the basis for our decision and I think we've been doing this for so long we

tend to sometimes not do that.

I'm not saying that's what happened in this particular instance but I think in the future, you know, whether we're agreeing with NIOSH or disagreeing with a recommendation or changing something, I think it's important that we make sure that the record through our deliberations is, you know, complete and does, you know, sort of carefully consider each, you know, part of the basis for our decision rather than trying to take a shortcut and saying, you know, well, we just disagree or we agree.

I think we have to, you know, really make sure that we get on the record the reasons why the Board agrees or disagrees, you know, much as we expect NIOSH to, you know, make a full presentation of their recommendations and their findings on a particular site or procedure, whatever, so we need to be able to do the same in our deliberations with that, so --

MEMBER ZIEMER: Dr. Melius?

CHAIRMAN MELIUS: Yes.

MEMBER ZIEMER: This is Ziemer. I think in this case the record was pretty clear both on our side of the ledger and for the review panel. It's focused on the temporal use of data and one of the surrogate data criteria.

And it seems to me that the crux of it is our understanding of the validity of that data set in terms of a temporal issue and both NIOSH and SC&A and the Work Group -- and I'm not on the Work Group but I did review the document that we got as noted -- simply don't agree on the interpretation or use of that data in terms of their temporal criteria as opposed to the appeal group.

In that line, I think there's disagreement among scientists as to the validity of those assumptions and that's the way it stands and we can live with that. But I think the record itself is pretty clear.

CHAIRMAN MELIUS: Yes, I don't disagree, Dr. Ziemer. As I said it was, in general we need to make sure how we're evaluating something and the facts behind that are on the record.

And I don't think, you know, again, we can't, I don't think it pays to sort of second guess what a review panel did or didn't consider or their judgment versus our judgment.

There's a process and I think it went through and it was, you know, presented fairly and I think we have at least a good understanding of why the panel, in what particular instances the panel took to disagree with our recommendations as well as NIOSH's recommendation, but thank you.

Yes, Dave. You have a comment?

MEMBER KOTELCHUCK: I don't have a comment on that. I was just, if we're finished with this, before Stu goes on, I would like to ask a question about one of the news reports that he gave.

CHAIRMAN MELIUS: Sure. Go ahead.

MEMBER KOTELCHUCK: On the Mancuso data that you mentioned, the Mancuso data capture, I'm delighted that we have the data but you also said that it was going to be destroyed or thrown away at some later date. Could you clarify a

little bit its status now?

MR. HINNEFELD: The law firm that was holding this material was moving to smaller quarters and was not going to maintain the storage facility where they were storing it.

And so the firm told, the one lawyer who was essentially Mancuso, had worked with Mancuso all those years ago and he was representing the interests of Dr. Mancuso's family, his heirs, told the attorney that, listen, we're going to have to, you have to do something with this or we're going to throw them away and so we went and captured anything we thought might be useful that we could interpret in order for that not to happen to that.

So what we've captured, the things that we thought might be useful, you know, we have and we will probably image those so they're generally available like the rest of our records.

That imaging, you know, process isn't going on. It's not the highest priority imaging we're doing but we're working it in, but anything we did not capture is probably destroyed by now

because that deadline passed.

MEMBER KOTELCHUCK: Well, I'm glad you, we have it. You have it, we have it, and I trust it'll be of use in the future, so good. Very glad to hear that.

MEMBER ANDERSON: And what was not, what was destroyed? Do you know what that is?

MR. HINNEFELD: Well, some of the things destroyed were, see, I may have to get Dr. Neton here to help me out. He was on that. Jim, you want to talk about it a little bit?

DR. NETON: Yes. There were roughly 300 boxes -- it was banker boxes of records that were stored at this law firm. We ended up capturing, I think, something around 70/75 of those boxes, quite a bit.

The majority of what we didn't collect was research related to non-radiological work that Dr. Mancuso did, specifically beryllium, and he worked a lot with the chemical rubber industry I believe. There was a lot of kind of those records. We didn't find them useful.

There were an entire wall almost of IBM keypunch cards. We just didn't feel any way that those were going to be useful to reconstruct things. We didn't know what the format was, that sort of thing.

And a lot of computer printouts. When you do epidemiological studies, you generate tons of printouts. There's no way to interpret those, you know, without encoded things, so we didn't collect a lot of those but we did get about 75 out of 300 boxes.

MEMBER KOTELCHUCK: Yes, thank you. Yes, Dr. Mancuso certainly did a large number of, many different types of epidemiological studies. His radiological studies were quite important and, I gather, you've got those so it's --

DR. NETON: Yes, we have the Hanford study and some work at Idaho and those sorts of things.

I do recall now that the children of Dr. Mancuso, who really possessed these records, did not want us to capture anything that was not of

immediate use to our program.

They didn't want us to capture them and make them available for someone else, for future research projects to second-guess or whatever that was, but so we were under pretty tight guidelines as to what we could and could not capture.

CHAIRMAN MELIUS: Any other questions for Stu? If not, we'll hear from Department of Labor. Thank you, Stu.

MEMBER KOTELCHUCK: Okay, we have one data --

CHAIRMAN MELIUS: Well, why don't you get them later?

MEMBER KOTELCHUCK: Yes, I will.

MR. CRAWFORD: Good morning. My name is Frank Crawford. I'm with the Department of Labor and I'm here to make the presentation that often Jeff Kotsch would make.

We have a different slide appearance and some animation so hope this comes through clearly with me operating this.

The changes are, of course, small since

our last meeting but the key here is that we've now expended $9.4 billion in combined compensation for Parts B and E. I'm wondering --

MEMBER MUNN: Every small part of that adds up.

MR. CRAWFORD: Yes. We know what Senator Dirksen said about that.

MEMBER MUNN: Yes, we do.

MR. CRAWFORD: Well, hopefully that's not the slide. Gee, this worked fine at home, folks, but --

CHAIRMAN MELIUS: It's a CDC computer.

MR. CRAWFORD: But this is telling us, you won't be able to interpret this, but this is telling us that of the total compensation of $11.9 billion, which is based on 182,650 cases filed, $9.4 billion were in direct payments to claimants and $2-1/2 billion were in medical bill payments, $2-1/2 billion were in medical bill payments.

Let's hope we get a little lucky on the next slide. Yes, there it started. Yes. Well, this slide worked. So we have 9500 approximately

accepted DR cases, which have accounted for $1.4 billion in compensation, but accepted SEC cases are about 2-1/2 times as much at 23,075 with $3.4 billion in compensation paid.

There's a small subgroup of cases accepted based on both SEC status and a PoC greater than 50 percent. That's for medical benefits determination primarily.

We have 834 cases in that category, and all of those categories combined come to about $4.98 billion in compensation, which differs slightly from the previous slide but it's pretty close.

These numbers will differ slightly from NIOSH. I took a look. There's 600 or 700 cases difference and those might represent the administrative closures that were on Stu's slide.

At any rate, we have about 45,000 cases that were referred to NIOSH. Almost 43,000 of those cases were returned to DOL, 37,000 with dose reconstruction, 6,000 without, and there are approximately 2,000 cases at NIOSH of which there

are about 1500 initials and 600 reworks.

We see here the Part B cases with dose reconstructions and a final decision. We have 29,500 of those cases. 10,400 were approved and 19,100 were denied.

Okay, 9 percent of the Part B cases were RECA claims, 12 percent were SEC cases that were referred to NIOSH, 15 percent were SEC cases never referred to NIOSH, and then other, a big category of 30 percent, beryllium sensitivity, chronic beryllium disease, and chronic silicosis. And NIOSH, 34 percent, had 34 percent of all cases filed for Part B.

Now 90,000 cases have been issued a final decision, of which, and this would include SEC cases, of course, of which 52 percent were approved and 48 percent were denied.

These are our old favorites. The larger sites generate most claims, so that probably will continue into the future too.

So we see that the AWE cases have been holding pretty steady around 12 percent with some

variations. I'm still expecting that to fade because most of the AWE sites, of course, closed long ago.

Now, for this meeting's discussions, we have a summary here of the number of claims involved, the cases returned by NIOSH, final decisions, Part B approvals, Part E approvals, and the total comp. and medical bills paid. I won't go through all these numbers. They're all on the website.

We can see that Battelle is a rather small site where Rocky Flats and Kansas City are large.

And the same thing for Idaho National Laboratory, Lawrence Livermore, and Blockson Chemical. Again, the National Laboratories are quite large and the Blockson Chemical site fairly small in terms of number of cases.

My impression is that Part E approvals are rising. I'd have to go back to look at the old statistics to see, but they seem to be overtaking Part B slowly.

MEMBER MUNN: Won't be long.

MR. CRAWFORD: Yes. And then we have Dow Chemical Madison, a relatively small site, and General Steel Industries in Granite City, Illinois, also a relatively modest size site.

In terms of DEEOIC outreach events, we'll see here, there's a number of slides on these. This is all routine, the members and so forth.

Here are the outreach events for Fiscal Year 2015. That would be through the end of September, of course.

A lot of the sites had quite good attendance and there seemed to be a lot of RECA-oriented sites this time compared to some of the other presentations we've had. They have small attendance but you have to expect that.

And we're going to be having a Traveling Resource Center meeting next week just before Thanksgiving and then three times in December at Los Alamos. This is now Fiscal Year 2016, of course.

And we're having a meeting this week in

Albuquerque and then another two meetings in December, also in Albuquerque. This is for the Traveling Resource Center again. And one in Niagara Falls. This is timely for Hooker I suppose. And in Farmington, New Mexico. Someone had asked that a meeting or two ago. Grants and Farmington, they're both coming up. And here's Grants.

And then I won't go through the handout slides which are just background information on the program. Thank you. Any questions?

CHAIRMAN MELIUS: Questions for Department of Labor?

PARTICIPANT: Is that for the floor in general for questions?

CHAIRMAN MELIUS: Only for Board Members.

CHAIRMAN MELIUS: Okay. Thank you. Tell Jeff we said hi.

MR. LEWIS: All right, thanks, Stu. Good morning, everyone. I'm Greg Lewis with the Department of Energy and I'm going to give our

program update.

First, I'll just go through our core mandate which is to work on behalf of program claimants to ensure that all available worker and facility records are provided to DOL, NIOSH, and the Advisory Board.

And then our responsibilities, of course. We respond to individual claims, you know, for requests for records and information. We respond to the large-scale facility research like the Special Exposure Cohort or DOL Site Exposure Matrix, and then also we work with DOL and NIOSH to do research and to cover facility changes.

As always, I want to talk about our site POCs. Those are the folks out in the field that both coordinate the individual records requests and responses to DOL and NIOSH, but they also work very hard to facilitate the large-scale records work, like for the Special Exposure Cohorts.

So, you know, for example, out in Livermore, I have a slide about it later on, but they've been doing quite a bit of work facilitating

site visits and data captures, worker interviews. Things like that are on the ground.

Local POCs, or points of contact, are the ones that help the NIOSH Advisory Board researchers to find the right people, to find the right data, information, and then ultimately to review those documents if necessary and provide it to the requester.

For individual records, we do about 16,000 records requests per year. We've recently, just recently finished a major effort to revamp our metrics and the different tools that we use to track and hold our sites accountable for responding.

We think it's been a very successful effort, it gives us a number of new data points that we're able to use to work with sites to make sure that we're providing things, both the quality of response and an on-time response.

I think we ended the Fiscal Year '15 with somewhere around, I think it was 18 requests overdue out of the hundreds and hundreds that are active at any given time. So that's a very good

number.

We're working to get that even lower, but at this point we've, in the last year we've had a very good performance we feel in terms of on-time responses, better than before. And we're continuing to work to refine that, to become more efficient and more effective in terms of a timely response because ultimately, as we all know, the claims rely on that.

DOL and NIOSH are waiting for our responses before they can move forward, so we work very hard to get them out in a timely manner.

So the large-scale records research projects, again, the Special Exposure Cohort work, again, we were working on a number of sites for NIOSH this year and those are just a few.

A lot of the, there's smaller, you know, enhancements to the Site Profile TBDs so I was getting kind of smaller requests for, you know, specific sites, but these were kind of the sites that we were working on, the Special Exposure Cohort or the larger records research.

I'll talk a little bit about Livermore. We hosted eight visits in 2015. I think there's, I think one additional visit in November and one December, although it might be three total, not two but, anyways, there is another couple in 2015.

We're also setting up an area where NIOSH, the Advisory Board, or SC&A can use a classified work space to generate their report. It makes it a little bit easier instead of clearing the documents ahead of time, sending them back to NIOSH or SC&A, the request, or having them write a report and then send it back to the site just to make sure that it's clear.

If the report can be written on site, it saves a step, saves some time, and also allows the user to use documents before they're cleared, so ultimately one that may result in less documents having to go through the clearance process, which is both, you know, it's timely and costly.

But also it's quicker because instead of going through the clearance process which can take, I'd say, weeks to months depending on how many

documents have been requested, they can be used in real time while the report is being written and then ultimately only those documents that are cited in the report or directly used for the report can be reviewed.

So it's a tremendous time saver, both for NIOSH and SC&A as well as us. It works for everyone I think. So we're working to set that up. In fact, that may already be set up but I know as of a couple weeks ago we were putting it in place.

And then also there was a large document request that had taken some time to review. I have a slide later on about the timeliness for document reviews.

And, you know, for all final reports that go to the Board or NIOSH reports or particularly sensitive documents or ones that get into areas that are a little bit tricky classification-wise on the DOE end, they all go to headquarters.

And at headquarters we have a very good relationship with our office classification.

They put our stuff, you know, top of the list in terms of priority and are typically very quick getting them out.

Out in the field it can be a little bit different because we're talking source documents so, you know, I don't know the exact count of documents but it was, you know, hundreds and hundreds of pages. Maybe even thousands of pages were requested in total.

Based on the staff at Livermore, it was very difficult for them to accommodate. Again, they can't really bring in, because of the expertise required to be a classification reviewer, you can't really bring in temporary or, you know, you can't find people that are qualified to do this elsewhere so it falls on the staff that are already onsite and, you know, can sometimes come into conflict with their existing workload.

So we worked with site management and as well as NIOSH to come up with a timeframe that both was acceptable to NIOSH and possible for our site given their staffing limitations and that

document request was finished I think just in the last month.

And, again, this is what I was talking about. You know, the typical turnaround for a NIOSH report or a draft document is eight working days, but that's for a report.

Again, the source documents that are requested from the site, you know, sometimes it could be hundreds of documents and they can be hundreds to even thousands of pages long each so that is a much more difficult process for DOE.

And then our third overall responsibility is to help DOL and NIOSH with the facility research. You know, we host the Covered Facility Database. I think there's somewhere in the range of 350 facilities on there.

Outreach, both Stu and Chris mentioned outreach and talked specifically about some of the events so I'll fast forward past that.

And then just wanted to mention the National Day of Remembrance as well. This is the Senate resolution. It designated October 30th,

2015, as the National Day of Remembrance for Nuclear Weapons Workers. This is the 7th year that that date has been recognized by Congress as a day of remembrance.

There were a number of events around the country again this year. Our office helped sponsor and attended an event at the Atomic Testing Museum out in Las Vegas.

There were also a number of events hosted by the Cold War Patriots in and around other DOE site locations. You know, again, it was a well-attended event.

It was a nice opportunity to celebrate the contributions of these workers and focus on, you know, their hard work, their dedication, the successes and not as much the, you know, the fact that many of them have been made ill. Sometimes it's nice to focus on that positive aspect and take a day to recognize them.

And this is just a copy of the pin that's been given out in past years. I think I saw at least one around here, Brad has his on. I forgot

mine, but something that was given out to a lot of the workers as a memento.

And I'll just mention our Former Worker Medical Screening Program as well. The program serves all former DOE workers, federal contractor and subcontractor, at all DOE sites. Of course, that's not AWE sites. Those are the DOE sites.

You can find more information on our website. We also have an annual report that has a summary of the different screenings we offer, some of the different programs as well as some of the statistics.

The Former Worker Programs that cover Lawrence Berkeley and Lawrence Livermore and the Sandia National Labs are listed there. The Worker Health Protection Program run through Queens College covers the production workers, and then the National Supplemental Screening Program covers workers from these facilities who have since moved out of the area.

And I think with that, I'll take questions.

CHAIRMAN MELIUS: Questions for Greg? Brad, you don't have any? Sitting there smiling. I figured --

MEMBER CLAWSON: Yes, I appreciate all the work that you do do and we still have some and I'm still wondering about Savannah River. That's kind of a difficult one but we've got to come to an end on that.

MR. LEWIS: Well and, I mean, if there's a -- it's my understanding, and I know, I've, you know, spoken with NIOSH and I think there's been some back and forth. I mean, my understanding is that we've been fairly responsive there.

I know there's been a, there was a delay with a large records request but I thought we had worked out a solution where those documents could be reviewed on site.

But if there's a, if there's any specific issues as far as our timeliness, our responsiveness, believe me, we'll do everything we can to resolve that.

DR. TAULBEE: This is Tim Taulbee. Got a little bit of an update, Brad. I just haven't had a chance to talk to you yet about that.

But we did get EDWS access reestablished back at the end of September, beginning of October and we were able to go on site the last week of October to capture some of the records that were not available in EDWS.

So it has broken free and we are beginning to see documents move again. I'm sorry, I just haven't had a chance to update you on this.

MEMBER CLAWSON: Okay, well, has SC&A got access too or --

MR. FITZGERALD: Yes, this is Joe Fitzgerald. That's news to me, too. I hadn't heard that logjam had broken. Although I want to add that DOE did make available classified disks that I can actually review in Germantown. This happened over, I think in the spring.

So that was very helpful and I think with the addition of the access that Tim was referring to, that's going to be, certainly that's

going to push us forward.

But there's been a delay. I mean, to be frank, it's been a while since we've been able to freely access, you know, Savannah River records so there's been certainly an interval where we have not been able to do as much.

MEMBER CLAWSON: Okay, I appreciate that. I'm sorry, I didn't know that these things had changed and stuff, so thanks.

MR. LEWIS: Yes, it's hard for me to keep on top of all the things flying around as well but I know, you know, if there are ever any issues, you know, we do what we can to break those logjams and work with the sites to try to facilitate access. It can be difficult.

I know at Savannah River particularly there was a lot of documents in play. It's a big, big site with a lot of complicated operations, so I know. It was honestly not easy for us to make all of those records available and we're doing the best we can.

MEMBER CLAWSON: Thank you.

CHAIRMAN MELIUS: Any other comments or questions? I would just add that I think Idaho is the other site that there's potential backups at. I think mainly that's sort of site-related issues right now but Tim's got an awful lot of work planned and it seems that we're --

MR. LEWIS: Well yes, and, like I said, I know it may be good to probably sit down at some point and work with Tim and whoever is involved on the Work Group, just make sure we at DOE know what the long-term plans are and we make sure that we have the, to the extent possible, have the funding and manpower put in place so we can facilitate that pretty smoothly without delays.

You know, we'll definitely do the best we can to make sure the documents and information are, you know, we get that to you in a reasonable timeframe.

CHAIRMAN MELIUS: No, and I think if we can plan ahead, it helps. Anything else? Okay, thank you very much.

MR. KATZ: While Dr. Melius is getting

ready for the next session --

CHAIRMAN MELIUS: Next person does not need a lengthy introduction.

MR. KATZ: No. But while he's getting ready for that, Dr. Melius is getting ready for the next session, can I just check on the line and see if, perhaps, Dr. Poston has joined us? John?

(No response)

MR. KATZ: Okay, very well. Thanks.

CHAIRMAN MELIUS: Thank you. Okay, going to give you a brief update on where we are with the Dose Reconstruction Review Methods Work Group which had a conference call a couple weeks ago, I believe it was, got updated. We're still in progress and we're still not at a point where we have any, you know, firm recommendations for the Board.

I think what we're trying to do with this presentation, sort of give you an overview of where, what some of the questions are that we have and thoughts and get your input, and if not your input at least getting you to start to think about

this and what we should be doing in terms of dose reconstruction reviews and how we go about them at this point in time.

I would add that, you know, sort of parallel to this, the Dose Reconstruction Review Subcommittee is preparing a letter to the Secretary and I think has at least an initial draft of that and a series of updated tables on what they've accomplished over the last few years in terms of doing individual dose reconstructions, so do that. And I'll talk a little bit more about the further documentation and so forth in a second.

So, sort of, in thinking about this, sort of thinking in sort of three, sort of categories of review. One is our, sort of our current reviews which is a, you know, sort of the standard thing we've been doing for, you know, a long time, basically since the beginning.

It's gone through I think a number of modifications in terms of how sites are selected and individual cases are selected and how the review process has gone down, continues to be

tweaked and so forth. But it really, the basic plan hasn't changed since we initially started.

And, you know, again, and I think it by itself fulfills a -- you know, a major mandate, again, for our Advisory Board is to advise the Secretary on how well dose reconstructions are being done. Are they being done appropriately, correctly, and accurately?

And so doing that is an important function and, you know, sort of the underlying methodology for that is reviewing individual dose reconstructions as we've being doing and this process involves all of the Board Members and I think has worked reasonably well over time.

I think the questions we have are what number of reviews do we do, what percentage? We set a generous and probably very optimistic goal at the beginning. We're clearly not meeting that goal in terms of percentage.

I'm not sure there's a percentage that, you know, is the model or the ideal but I think we need to think of how much we're doing, and really

it's sort of, given the resources, both NIOSH, SC&A, and Board time that's involved in this and what's a reasonable number that we do over a period of time?

We've constantly and continually modified how we select cases, trying to make sure that all sites are represented, trying to look at AWE sites, DOE sites. Trying to look at by Probability of Causation, a whole number of other criteria. Do we need to modify that or set some goals for doing that?

Probably most importantly is do we need to modify the resolution process? How do we resolve, once the SC&A has done a individual case review, how do we then resolve that with NIOSH and sort of, and with the Subcommittee?

And how do we come at that, because that is sort of the rate-limiting step right now. It just takes time, given availability of people and the Subcommittee and NIOSH and SC&A resources to do that. It takes long.

We've had a proposal from -- a

suggestion from SC&A that we, if there's agreement between NIOSH, that we sort of set up a system where there's a -- if there's agreement between NIOSH and SC&A on a particular finding that the Subcommittee should not spend any time reviewing that.

Some of us have concerns about that because it sort of limits the Board's involvement and the Board's responsibility in terms of doing individual case reviews.

But there probably are ways along those lines that we can make the resolution process more efficient, maybe by allowing the Chair of the Subcommittee to gag people if they, you know, want to spend, try to spend too much time on a trivial matter or whatever, but some discipline that -- you know, carrot or stick. I would think we can decide, do that. We'll have Wanda bring her cookies or something and try that, but it's, we do need to make that more efficient if possible.

And I think there's also, another is do we try to collect more or different information on when we're doing the individual case reviews?

Sort of the methodology has basically stayed the same. I think it's been modified from time to time.

But, you know, another way of maybe avoiding some of the unnecessary time spent or less productive time maybe to, you know, not pay much attention to, if you don't record something, people don't have, you know, you don't have to resolve it then, come to a resolution.

So it may be that for certain kinds of reviews or findings we shouldn't bother to even do the review because we never have a problem with them and all we do is take up time and effort doing that.

Or maybe we do a mix of approaches on that subset that would have a more comprehensive list of parameters that are reviewed and then another set that's a little bit more focused.

And let me go through all these because everything is sort of intertwined here. We'll do that.

Line reviews we've sort of put off doing for quite a while. We're now doing, I believe six

a year is the goal. I think I've reviewed a number of them, if not all, and the reports, I think they are helpful. They obviously take up a lot more effort both to do and in terms of trying to resolve and I think we're still fairly early in the resolution process, so to speak, on the blind reviews and do that.

But I don't think the rest of the Board has really had an opportunity to see what the findings are and understand those, so I think one of the first things we want to do, and talked about this with the Work Group a couple weeks ago, is Dave's going to do a presentation on that, hopefully at our next Work Group call. I think we can do it there. If not, at the next Board meeting, excuse me, next Board call in January. If not, we'll do it at the next Board meeting in March as a way of just bringing everybody up to date on that process.

That means you're all going to get a lot -- all the Board Members are going to get a lot more paper to look at, if you don't have it already.

Some of these reviews are fairly long. But, as I said, I've reviewed a number of them. I think they're interesting and helpful in terms of findings.

And then I think after we've done that, I think we need to look at, you know, how many of these do we try to do each year? How do we select the cases?

We've not done that many so we haven't hit a lot of the sites and some of these sites are big and obviously complicated so, you know, like doing one blind review on, say, Savannah River really may not cover very much of that site at all under that, and are there changes in methodology there that we need to look at?

And I think before we can make decisions on that, we really, as a Board, need to take a look at what's been done so far and, you know, what those findings are and see if we can reach agreement on what makes sense in terms of going forward.

The final area I'll call "targeted reviews" and that's: is there some part of this

process where we can focus on certain issues that we haven't covered or certain types of dose reconstruction processes or methods that we think may be more likely to be problematic?

And one area we talk about in the Work Group is sort of the consistency of the dose reconstruction process. If a person, a claimant, or two claimants that worked in the same area or same time period, are they going to get the same kinds of dose reconstructions done? Is the methodology and the decisions that are made as part of doing the dose reconstructions going to be consistent?

And obviously their exposures may be different depending on the tasks and how long they worked and things like that, but a fair amount of the dose reconstruction process does require a fair amount of judgment on the part of the dose reconstructor to do. There are a number of methods that are used that are not part of a TBD or procedure that the Board or even NIOSH has reviewed.

And I don't think we can expect to

review every detailed methodology. Dose reconstruction does require some, you know, professional judgment. And I think we see some of that when we do the individual reviews but we don't necessarily see whether that's being consistently applied.

ORAU does have a quality assurance, QA/QC process, I think, and certainly much better than it was when the program started. And the Dose Reconstruction Review Subcommittee has reviewed that a few years ago. But I think even given how good that process may be, the Board still has, you know, some responsibility for making sure that it's addressing concerns in terms of consistency and so forth in terms of this.

And so I think we need to pay more attention to this area. And so at this point we're trying to just come up with what are ways of doing that, what are ways of targeting that would be useful to the process, and how do we select those cases and implement something like that going forward? So, again, that part of it is going to

require some more work on the part of the Work Group.

Just in terms of documentation for you, the Board Members, to have -- I believe this has been shared with the entire Board, I'm not sure -- which is the DR review results for the upcoming letter to the Secretary. Did that go out to everybody or just the Subcommittee?

MR. KATZ: I believe that's just to the Subcommittee, and maybe the Methods Work Group people as well at this point, because those statistics really aren't completely up to date yet in terms of dealing with certain corrections that need to be made and so on.

CHAIRMAN MELIUS: Okay. So we need to get that, I think, to the full Board, maybe when those corrections are done, if that's relatively soon. And that's going to come out as we do the letter to the Secretary anyway.

Our Work Group also had the SC&A report done. I think it was basically two sets of case reviews, sort of looking at where in those case

reviews, whether any of these individual cases, while they were in process, had become parts of an SEC. And a little more level of detail, whether the basis for the SEC finding essentially would have impacted the dose reconstruction. You couldn't reconstruct internal dose from, you know, thorium at a particular site, well, but here, before that SEC finding, NIOSH was reconstructing thorium exposures at that site. So, sort of an inconsistency there and I think we need to understand that.

And the other way there's a potential problem is we will have Site Profile and other documents, Technical Basis Documents, that may change, because they're constantly changing, that may have impacted the individual dose reconstructions.

Now, NIOSH has a process for addressing that, but I think it's helpful to know how that would have impacted or could have impacted our conclusions on, you know, doing the individual case reviews.

So that report has recently been sent to us by SC&A and I think that we can circulate to the entire Board. It's long, but I think it's helpful, if only as a benchmark of where we are now and some of the limitations of our current dose reconstruction review process.

And then finally we're working with NIOSH to get a -- I'm calling it a mapping of the dose reconstruction process, but to go through, for some selected sites, to look at what -- let's say Savannah River, for a hypothetical example -- a site and look at what, actually, for Savannah River, what methodologies are actually used? What documentation does the ORAU dose reconstructors actually utilize when doing dose reconstructions at Savannah River, for example.

And so those are, you know, Site Profile documents, TBD, you know, various kinds of worksheets and training instructions. I mean, there's a whole variety of things that we sort of -- I won't say uncover, because they're not sort of deliberately hidden from us, but I think we're

finding out more about them and I think they're -- I think we need to have a better understanding of those sites.

And Stu and I have talked about this, and I think it's something that probably important for the program to have also, because if go back ten years from now, how did you reconstruct doses for individuals at a particular site? And if you don't have sort of the documentation on the methodologies used at any given point in time, how are you going to know, when you get new information or whatever, that something needs to be, you know, redone or relooked at and so forth?

And, again, I think it's important. This is not saying that, you know, there's a whole series of serious problems with the dose reconstruction reviews that are currently -- or dose reconstructions that are being done, because I actually think they're being done well, and I think that process has improved as you would expect it to improve over time. But, again, it's our mandate to review and provide assurances that it

is being done well.

So, that's our plan and I welcome anybody's comments or input from Board Members at this point in time, if you have questions. The Work Group that we have, if I remember everybody: Dave, Paul Ziemer, Josie, if I'm right. Dave Richardson also, I believe, on that.

And I don't know if any of the Work Group Members want to add anything or not. Just open up for Board Member questions or comments.

MEMBER ZIEMER: I have nothing to add. This is Ziemer. The Chair put it very well.

CHAIRMAN MELIUS: Thank you.

MEMBER KOTELCHUCK: Dave Kotelchuck. I, as chair of the Subcommittee, the Dose Reconstruction Review Subcommittee, we're holding a meeting. I hope it will be in January. And it seems to me a large part of that meeting will be to address the questions that have been raised by the Methods Work Group, and with particular focus on the blind reviews, and with recommendations for the next Board meeting.

And I think fairly soon, as a Member of both the Methods Committee and the Subcommittee, I think we should think about a full meeting of the Subcommittee and the Methods Review Group where we get together for, if you will, a day, for a special meeting for developing strategy.

In part, I mean, I feel that we have so many people on the Subcommittee who have years and years of experience. I feel inadequate speaking, if you will, for them and the Methods Committee. That is, I represent my best thinking about what people are thinking on the Subcommittee, but the Subcommittee really needs to, well, make decisions.

And if we are going to change methods, they are, I think, some of the best people to be engaged in the discussion about changing the methods so that we can really make the best judgment possible on how we should be changing.

So what I'm suggesting is the Subcommittee will talk about these issues at its next meeting and put a large part of the meeting

around those strategic questions or methodological questions.

And then I do think that it might be a good idea to have a joint meeting of the Subcommittee and the Methods Work Group, and even face-to-face in the sense that a lot of things will be discussed and intensively and fairly quickly either dealt with or just various alternatives proposed in short order. And I think that suggests a face-to-face meeting and I'm suggesting it and we'll see what both groups think about that. But I think it might be helpful.

CHAIRMAN MELIUS: I'm going to disagree with you, Dave. I think this is a Board responsibility. It's not a Subcommittee responsibility. It's not a Work Group responsibility. And I don't think we can expect or should expect the Board just to rubber stamp a set of recommendations. I think the Board needs to be involved in determining what we do going forward.

It's actually how we started this whole

process. I think we spent a fair amount of time in our early meetings, once we got the regulations approved and so forth. Those of you that were around then, which there are many of us, remember that.

And I really think that, at least the general parameters for how we do dose reconstruction reviews and how we make decisions and how we go about doing that, ought to be something that the Board as a whole decides and engages in.

And I think if we put the two groups together, we're getting close to a quorum of the Board anyway, so I'm not sure we can meet. And I think there are others on the Board, I think, that would like to be involved. I'm not forcing anybody. But so I'd almost rather do it as a meeting of the Board.

It does not mean that the Dose Reconstruction Review Subcommittee should not meet, discuss, and, you know, be involved, you know, maybe at a more detailed level.

But I think it is something that the Board -- because, again, we haven't really changed our methods. We sort of delegated to the Subcommittee over the years, and I think we need to bring it back and discuss it as a whole.

MEMBER KOTELCHUCK: Just in response, I buy that. I mean, the Methods plus the Subcommittee, you're right, is most of the Board anyway, so let's have the Board.

So, really, the Subcommittee will discuss these issues at its next meeting and then we'll hold a Board meeting, a full Board meeting, to discuss the changes that we'd like to make. Yeah.

CHAIRMAN MELIUS: Phil, you've been patient.

MEMBER SCHOFIELD: Yes, Phil Schofield. I would like to see more of a feedback when you're going through a case and you're looking at it. Sometimes you look at what the personnel who did the dose reconstruction, you look at what they've done and it raises questions. Sometimes,

I mean, serious questions. You want to know, well, how did they arrive at their numbers? And it would be nice if we actually had feedback when we do have questions on these cases. And right now I don't feel the feedback has been very good.

CHAIRMAN MELIUS: Feedback from where, specifically?

MEMBER SCHOFIELD: When we've had questions on some of these doses. I've been on a few cases where, really, we were left scratching our heads like, well, how did you arrive at these numbers?

MEMBER BEACH: From NIOSH?

MEMBER SCHOFIELD: Yeah. Yes, from NIOSH.

MR. KATZ: This is Ted. I mean, you do have the DR -- the Dose Reconstruction Review Subcommittee does go over each of these.

And I think if you look at -- if you want to see the discussion of whatever the issues are, the findings, I mean, that's where you'll find it, Phil. And, I mean, I'm happy to send you the

transcripts as we complete those if you want to look at those, but that's the record.

MEMBER SCHOFIELD: Could we submit a question to them on a particular case?

MR. KATZ: There's absolutely no reason why you can't do that.

MEMBER SCHOFIELD: Okay, well, in the future I will remember that.

MR. KATZ: Yes, absolutely, absolutely.

CHAIRMAN MELIUS: Sure. I mean, I'll agree with Phil. I think there is sort of a -- there is a disconnect there. And those transcripts are long and complicated to try to find out what's going on and there's a time delay and so forth.

But it's also one of my concerns about the resolution process. Like, you know, well, if the Subcommittee isn't going to deal with certain findings, they said, well, we'll rely on, you know, the Board, at least two Board Members involved in looking at each individual case review that SC&A

had done and interacting with them.

But I don't know what the Subcommittee then does with those findings, or our recommendations from that. I mean, in fact, I get feedback sometimes from SC&A saying, well, you know, the Subcommittee says we shouldn't report it that way. They don't consider that a finding or something.

It's my own fault for not, you know, quite following up and, you know, yelling at Dave and saying what's wrong with you, how come you're not listening to me or whatever.

But there is that disconnect and I think -- and I know there's not an easy way. It's not like -- if we had, you know, Dave report on each finding or what happened at every Board meeting, you know, we can add a day, I guess, because it is a long and detailed process.

And I would ask, you know, as we go through this process, thinking about how we make sure that all the Board Members stay involved, maybe we need to rotate people on and off that

Subcommittee more. We've tended to, you know, keep the same people on for a period of time, for a long period of time. But, again, it is something that's time consuming, and having the same people on, at least for periods of time, is important in terms of consistency of the review process. So I do think we need to sort of think how we can address that.

MEMBER BEACH: Well, in the reports that come out, the set reports, they're long, but those will give you some of those answers as well. I know there's one pending right now that just came out from SC&A, from the last -- it's set, what, 9 through 21? So, anyway, they're out there.

CHAIRMAN MELIUS: Yeah. But do they need to be one at a time? You know, some ways of communicating better. I don't know. Wanda, you look puzzled or --

MEMBER MUNN: I was just going to comment that, as a Member of the Subcommittee, I've never experienced any lack of detailed information response from anyone when we questioned either the

agency or the contractor with respect to how they had achieved any of the figures that we saw when we were in review.

My personal experience has been extreme effort on the part of all of the dose reconstructors, regardless of their background, to try to make sure that all of our questions were answered.

And it's certainly not uncommon in the Subcommittee meeting to have specific questions posed. "How did you reach that number? What's the difference in these two? Why does one of you have this figure and one has another that's four figures away?" And when I was asking those questions, I have always had very good response, at the meeting usually.

Whether or not that's reflected in anything other than just the transcript is hard to address, I suppose. That must be the kind of thing that --

CHAIRMAN MELIUS: Yeah, I think if you're not on the Subcommittee, if you raise a issue

about a calculation or whatever, something about the process, after you raise it, the report goes, then, you know, NIOSH gets involved. The Subcommittee gets involved. It gets resolved, but that resolution doesn't get back to the individual Board Member that raised the question to begin with.

MEMBER CLAWSON: Jim, this is Brad. That's exactly right. The thing that I see, all of us get to review these and we have little things we couldn't figure out in it. But when it gets to the Work Group, then it gets down to the brass tacks, and maybe what we're not doing is disseminating the information back out of it because it's stuff that we may have worked on for a month or a month and a half to get resolved and we finally get resolution and we forget to tell everybody else this is what we found out.

CHAIRMAN MELIUS: It's also the timeliness of the process. That resolution may not take place for a couple years or more after you've done that. And I, as a Board Member who was

involved in the review, has forgotten and so forth.

MR. KATZ: Jim, if I can suggest something. I mean, SC&A does often discuss, when they're doing the case review, that a Board Member raised this issue. That doesn't address the feedback issue but we could very simply sort of track that when we have issues that have been raised by the Board Members, the two Board Members that are on the case.

SC&A could flag that and then we could -- I mean, it would be very easy to follow up and actually give them that feedback. So if that's something the Board would like to have happen in the future, we certainly can make that happen.

MEMBER SCHOFIELD: I would definitely like that.

MEMBER MUNN: That shouldn't be an overwhelming clerical burden.

MR. KATZ: No, no. I think that would be very easy to do.

MEMBER BEACH: Well, and it's kind of what we did on the templates. SC&A sent a memo out

and that way we could track that that was an issue that we thought we should bring up to the Board. So, out of our session, Henry's and I's.

CHAIRMAN MELIUS: Board Members on the phone, do you have comments? Don't want to ignore you.

MEMBER ZIEMER: Yes, this is Ziemer. I have no comments. I think all of these issues that have been raised, a lot of it goes back to those initial reviews. We see a lot of these at review time and maybe it doesn't get transmitted forward.

CHAIRMAN MELIUS: Thank you. Dave, you have --

MEMBER KOTELCHUCK: Yeah, I think that I'm open to thinking about -- and we can talk about this in the Subcommittee -- of what to and how to give reports to the Board on a regular basis about what we're doing. Obviously, I have to control my predilection to 50-minute talks, but I think I can try to compress it to the Board. But I think we can try to give Board reports, brief Board reports.

CHAIRMAN MELIUS: Fifty-minute talks

followed by a quiz.

MEMBER KOTELCHUCK: Right, which someone else grades.

(Laughter.)

CHAIRMAN MELIUS: Any other questions or comments?

(No response)

CHAIRMAN MELIUS: Okay, if not, we'll move ahead. And if we can move ahead with a break and we're breaking until 10:30.

(Whereupon, the above-entitled matter went off the record at 9:57 a.m. and resumed at 10:33 a.m.)

CHAIRMAN MELIUS: Okay, we have a quorum. We'll get started. And the next point of business is an SEC petition on Battelle Laboratories. And Tim Taulbee is going to be presenting.

DR. TAULBEE: Thank you, Dr. Melius, Members of the Board. This presentation's going to be on the Battelle Memorial Institute King Avenue SEC Petition Evaluation Report. Before I

get started, I want to recognize the ORAU evaluation team led by Mike Kubiak and Chris Miles. Vince King and Jason Davis also participated on this. They did the lion's share of the work, I just get the opportunity to present it to you.

So, a little bit of an overview about this petition is NIOSH has determined it's not feasible to complete a dose reconstruction for an existing Battelle Memorial Institute King Avenue claim. On October 19th, just last month, the claimant was notified and provided a copy of the Special Exposure Cohort Petition Form A. On October 27th, they filed a petition.

This is an 83.14 petition. It was submitted to NIOSH. And on November 2nd we completed our Evaluation Report and issued the report, and I believe last week was sent to the Board Members.

Just to remind everyone, the previous, at Battelle King Avenue, the previous SEC Class was from April 16th, 1943 until June 30th, 1956. And the reason was for internal exposures to uranium

and thorium, and external exposures prior to February 1951 where we had no external monitoring whatsoever.

And so this was the time period. June of 1956 is when they started some bioassay. There was no bioassay monitoring prior to that. We couldn't find any air sample data.

So, since that time -- this has been a couple years since I presented this to the Board -- we've been doing a lot of research, as you'll see, which is why these dates seem to be producing a report in about two weeks. That's not quite the case. The case is that we've been working on this for the past couple of years, and so what you're seeing is kind of the final result here.

The Class that we're proposing is that all Atomic Weapons Employees who worked at the facility owned by the Battelle Laboratories at the King Avenue site in Columbus, Ohio during the period from July 1st, 1956 through December 31st, 1970 for a number of workdays aggregating at least 250 workdays, occurring either solely under this

employment or in combination with workdays within the parameters established for one or more other Classes of employees in the Special Exposure Cohort.

So, how did we come to this particular conclusion? Again, some background on the Battelle site. It's an EEOICPA covered facility from 1943 and 1986. It's only 58.3 acres. It accommodates 13 buildings. So this is a very small site compared to most of the other sites we look at.

They performed atomic energy research and development work, R&D, for AEC, the Department of Energy, the NRC, DoD and commercial entities. So it's a big conglomeration, not just of DOE work. It's owned and operated by Battelle Memorial Institute.

The main radiological buildings are listed here. Building A is corporate offices, but they also have small laboratories. Building 1 is a foundry; 2 is metal working; materials building; radio chemistry in Building 4; and a machine shop

in Building 5.

Buildings 1, 2, 3, 4, and 5 comprise the bulk of the radiological work there at Battelle Memorial Institute. And this is a picture of it. You can see the particular buildings are centered right there in the center of the facility. You've got 1, 2, 3, 4, and 5.

So our data capture efforts, as I alluded to from the last time that we presented the Battelle SEC to you, was we've conducted some on-site data captures in August 2014; also at the National Archives in College Park, Maryland in March of 2014; down in OSTI in February 2013 and August 2014. And we even found some documents out at Idaho National Laboratory this past January.

So what I want to focus on here, as you'll see from the report that we provided, is that the reasoning that we're recommending an SEC here is due to the thorium operations. And so what we did is we started looking at their thorium operations after that 1956 date to see what was the magnitude, what were they involved with.

And we found that they were doing work with uranium and thorium alloys from 1955 to 1959, did some corrosion testing in 1961, did some experimental coating of small thorium oxide spheres in '62. And then we really had no information from '62 to '66 of any thorium operations that were going on.

And then in '66 some preparation of thorium and uranium irradiation calibration samples. And then '68 to '69, some experimental work with thorium ceramics.

Nothing in here is really indicating a severe exposure, at least other than that top bullet, '55 to '59. Corrosion resistance testings, experimental coatings, none of these seem to really raise extreme concern about potential exposures.

That was until we started looking at the radiological survey reports that we captured. And these caused us some pause as to what was going on and our level of understanding of what was happening there at the site. And so I want to go

through some of these here as part of the presentation to point out some examples as to why we came to an 83.14 decision.

One example is July 1957, a survey of multiple buildings indicated widespread uranium and thorium contamination. This is an excerpt from that survey report in 1957. The surveyor indicated about every lab surveyed contained uranium or thorium samples in some form.

These samples are stored in desks where food is eaten. Little care is taken to prevent ingestion. No care is taken to prevent material from entering the sewers. And this was written in 1957 by the rad techs.

Another example is March of 1960. This was a spill resulting in personal contamination occurred when a pressure built up in a flask containing thorium nitrate. The incident report that we've got identified the individual who was involved in this and who was contaminated. We followed up, we went back to the site and requested that person's records, radiological records.

So if we were doing a dose reconstruction, would we see this incident and could we estimate this person's exposure? What we found is there's no discussion of this incident and no bioassay records were taken for this individual. So if we were doing a dose reconstruction, this exposure would be missed.

1961, again from the radiological survey reports, we have air samples taken in the machine shop grinding room. They actually took an air sample for thorium at this time and it was two times ten to the minus tenth microcuries per cc. The survey indicated the worker wore a half-face respirator. There's a note at the bottom of the survey that the worker should leave a bioassay sample. Again, we went back to the site and said, please provide us these records for this individual, and there's no bioassay records in this individual's file.

So, again, we have a case where Health Physics is saying this person should be monitored via bioassay, and we have no record that the

bioassay was conducted.

1963, survey report following a cleanup of a spill in Building 5 involving thorium. And again, if you recall that list I went through in the beginning, there's no discussion of any work from '63 to '66, of any thorium work. And they indicated the spill had been cleaned up with a sponge, which was a shelf. And it had just been painted prior to them taking the smears in order to fix the contamination in place.

In this particular case, we don't know what the original spill was, what the levels were, what people were exposed to; all we have is the aftermath of the cleanup and the monitoring after the fact. And I guess the fixed contamination was high enough they felt they needed to paint over it to keep it from spreading.

And this is probably the most concerning, from my standpoint, in reviewing all of this material. It's June 1963, first aid alerted the safety office, which was the RadCon organization, of a melt operation going in Building

1 using magnesium, lithium, and thorium metals.

Building 1 was the foundry. And Health Physics then went and investigated. And these excerpts here is what's directly from their survey report. Melting operations started the day before with no Health and Safety oversight and no respiratory protection. The melting furnace was hooded, but the pouring operation wasn't. The last line really caused us some significant pause here. "The men involved said that they would report all future use of radioactive material."

So, from my standpoint, we're not sure that operations was reporting all uses of radioactive material prior to this date, and we really don't have a great deal of confidence after this date that they were reporting all of their operations.

Health and Safety got involved and looked at the operation after they were notified. But how many other thorium operations were going on prior to this time period that they didn't tell Health and Safety about and somebody didn't catch

them doing?

1964-1965 surveys for thorium in Building 3, which was the materials building; this is an October 1964 memo. And it states the re-smears taken of all locations showing above-permissible alpha and beta gamma activity on the routine monthly smear survey for September showed no alpha/beta/gamma contamination present, with the exceptions of a floor smear at location number 25 in the first floor bay area and a hood smear in number 4 in Room 3203.

So these were monthly smears that the site was now doing, and they captured that there was some contamination. They obviously had the operations folks clean up their areas. They went back and they re-smeared here in order to evaluate how well the cleanup went, and there was still a couple of locations.

The next line though becomes important here. "I suggest that the floor smear location number 25 be smeared weekly in order to keep closer control of the possible spread of contamination

from this area."

So, prior to this '64 timeframe, again, monthly smears, were they catching contamination that was happening in that area? The hood in Room 3203 is higher in alpha activity than should be tolerated for a room in which eating areas are involved. So these would be areas of the laboratory where they've got hoods, where they've got thorium going on, uranium work, and they're eating in these areas. He suggested the hood should be cleaned and re-smears taken until it's below, effectively, that's 20 dpm per 100 square centimeters.

So, between 1966 and 1970, we see some infrequent surveys and air samples for thorium. They really begin to drop off, from what we saw within the rad surveys. Again, we don't know the source term -- we're not certain of the source term, I should say. We do know earlier inventory is incomplete. The interesting contrary evidence here is that the air samples are quite low. They're down in the ten to the minus thirteen, ten

to the minus fifteen microcurie range, which is below permissible limits from today's standpoint.

April 1970 is the last thorium operation that we've been able to identify from review of these surveys, and this was the cleanup of a grinder.

To date, we have no indication of thorium work from 1971 through 1982. 1982, there is some indication of thorium work and the individuals involved actually have thorium bioassay. But between '71 and '82, neither of the surveys, neither the inventories, the operations reports, nothing is indicating any thorium work during that time period.

So, as a result, we're recommending to add a Class up through December 31st of 1970, due to the available internal monitoring records, process descriptions, and source term data are inadequate to complete dose reconstructions for thorium exposures with sufficient accuracy for the evaluated Class of employees during the period from July 1st, 1956 through December 31st, 1970.

Uranium bioassay data is available starting in July of 1956 for workers in Buildings A, 1, 2, 3, 4, 5, and 6, which are the prime radiological buildings.

For health endangerment, the evidence reviewed in this evaluation indicates 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 covered by this evaluation who are employed for a number of workdays aggregating at least 250 workdays within the parameters established for this Class, or in combination with workdays within the parameters established for one or more other Classes of employees in the SEC.

So again, our proposed Class here is for all workers, Atomic Weapons Employees, who worked at the facility owned by the Battelle Laboratories at the King Avenue Site in Columbus, Ohio, during the period of July 1st, 1956, through December

31st, 1970, for a number of workdays aggregating at least 250 workdays, occurring either solely under this employment or in combination with workdays within the parameters established for one or more other Classes of employees in the Special Exposure Cohort.

So, why are we including all workers here at the site when it's really those central buildings? And it involves our inability to place workers within specific buildings and job title by some other identifier. There's an apparent free flow of worker movement within the facility. Again, this is a small facility. The only noted exceptions are high radiation areas where they had several radiation sources.

As I mentioned, this is a small site. It's approximately half the size of the Idaho Chemical Processing Plant, 59 acres versus 160 acres, and about one-fifth the size of the H Area at Savannah River.

So, again, this is a very small site. You've got workers that could move between

buildings. They could have been going around delivering mail or taking out trash, janitorial services within these laboratories.

Obviously, with the eating, being able to eat in the laboratories, there was minimal rad control from that standpoint, and Health Physics identified that as an issue within their radiological surveys.

So, with that, I'll be happy to answer any questions that you may have.

CHAIRMAN MELIUS: Thank you, Tim. Josie?

MEMBER BEACH: Okay, so my question goes back to your cut-off day of 1970.

DR. TAULBEE: Yes.

MEMBER BEACH: In your report, it talks about -- and it doesn't say how many, number was redacted, individuals. They looked for some bioassay data for thorium in 1981. And I know you kind of briefly touched on it. Could you go into a little more detail, how many and why do you think that happened?

DR. TAULBEE: It was a small operation involving thorium. And so those workers were monitored via bioassay. And the ones that we could identify, we see the bioassay in their files.

So, this would be, like, one of these small operations that I was talking about going on through the 1960s, ceramics or something along those lines. And then Health and Safety did follow up with those workers, and we have seen those bioassay results for that 1982, '81-'82 timeframe.

MEMBER BEACH: Okay. So between '70 and '82 you don't think there was anything happening?

DR. TAULBEE: I don't -- well, honestly I don't know, is what the issue is. We don't have evidence one way or the other. We have no evidence that any exposures occurred; we don't have any evidence that it didn't occur.

And so my standpoint is that if evidence comes to light that exposures did occur, then we can revisit 83.14 and whether or not we can estimate those exposures between that '70 and '82 time

period.

MEMBER BEACH: Okay. This is just a curiosity question. I noticed that Ohio State University was right close to the plant. Did any students work in the plant that you know of? I know they wouldn't be covered, but just more of a curiosity.

DR. TAULBEE: There were some students that did do some research over there at the King Avenue. There was some, but not a huge amount. This is primarily professional chemists, and with the foundry work that you described, these would be machinists. Students generally didn't get involved in that type of work.

CHAIRMAN MELIUS: Other Board Member questions? Wanda?

MEMBER MUNN: Just one. The bioassays that you do have, are there any red flags regarding thorium?

DR. TAULBEE: No.

MEMBER MUNN: Okay.

CHAIRMAN MELIUS: Wanda, into the

microphone.

MEMBER MUNN: My question was, of the bioassays you do have, were there any red flags regarding thorium. And the answer was no.

MR. KATZ: Thanks.

CHAIRMAN MELIUS: Any other Board Members? Board Members on the phone, do you have any questions?

MEMBER ZIEMER: This is Ziemer, Jim. I have a couple of questions for Dr. Taulbee.

CHAIRMAN MELIUS: Okay, go ahead.

MEMBER ZIEMER: Mainly for clarification. Dr. Taulbee, as I read through the ER itself, I noticed that there were entry restrictions in a couple of cases. It looked like Building A had entry restrictions, and I think Building 4 people could only get in if they got permission from the lab supervisor or something like that.

Is the issue that we just don't know who those people were that could get in and the restrictions? In other words, there appears to be

some restrictions that are not necessarily high radiation levels. But there must have been personnel restrictions but we just don't know who they were?

DR. TAULBEE: That is correct. We've not been able to find any rosters that indicate who was on an access list at a given time. The only thing that we have found is basically what we put in the Evaluation Report, is that there is some note of there were some areas that did have restricted access.

Although, getting the laboratory supervisor to add you to the access list is pretty open, in a sense, especially if you don't have what that roster is. Does that help some?

MEMBER ZIEMER: Right. I guess we're left to assume, again, that virtually anyone on-site might have potentially been on the list. So we have to assume that that's the case, correct?

DR. TAULBEE: That's correct.

MEMBER ZIEMER: Thank you.

MEMBER BEACH: I still have one more.

So, it looked like the way they dealt with the lab, it was pretty -- I don't know the right word -- pretty lackadaisical. On your report, it talks about the labs contained thorium and uranium. And it was in this desk area where people ate their lunch.

So I guess I'm concerned about the cut-off of 1970, because you don't have anything that says they were doing anything, but you don't have anything that says you really weren't. So I guess --

DR. TAULBEE: What we saw was a decrease in kind of the thorium operations, if you will, through the late 1960s. And then we only had the one instance of April of 1970 of some thorium work. And then absolutely nothing.

Now, we've looked through other records. We've looked for any operations. And it doesn't have to be just the rad survey records. These would be any reports coming out of Battelle about thorium that they would produce, because Battelle was a research institute. And they liked

to report on what their findings were and what they had and what they dealt with. So the actual reporting coming out, as long as it wasn't proprietary, would be reported upon. And we just see no evidence of any thorium work during that time period.

It doesn't mean it's not going to come to light, you know, as we do more work or we do other data captures at other sites. If something does come to light, then we can look at this again from that time period. But right now I just have no evidence of exposure.

MEMBER BEACH: Okay, and then just quick follow-up. What about the cleanup? You did talk about hoods that had to be cleaned out. Was there a concentrated effort that you could find that they actually did a good clean-out of all areas?

DR. TAULBEE: That 1966 memo is what I think it was that you're referring to, of the cleanup of the hood. It was just that. They recommend the operations folks clean up that hood

until surveyed below that 0.2 dpm, and that's all that there was as far as a discussion of it. That's really all that we have with regards to that.

CHAIRMAN MELIUS: Phil?

MEMBER SCHOFIELD: I have questions on the residual. When you're doing grinding and stuff, you generate a lot of waste, you generate a lot of particles. My concern is -- and like when they did the hood, how effective was that hood, was it ever verified, did it have a HEPA filter on it so that anything being discharged was not putting workers or people outside of the building at risk? I mean, did they survey the walls, the roof in these buildings? What kind of records do you have on doing cleanup?

DR. TAULBEE: With regards to the cleanup, I'm actually not sure off the top of my head. I'd have to go back to look at that. But keep in mind that these would be small -- or, you know, all these thorium operations appear to be small, but with significant thorium concerns from an exposure standpoint during that work.

The last one that we have -- and I've pulled back the slide to April 1970 -- the last thorium operation that we've identified to-date is surveys where they were cleaning up one of these grinders. So this would be a cleanup survey of this particular grinder. We have no information as to whether the grinder was ever used again for thorium or anything else.

With regards to clean-out of buildings and ducts and fume hoods, I just don't have any information from that standpoint. There's only a few areas -- I shouldn't say few, because it's in multiple buildings and labs from those earlier discussions there -- where thorium was worked with. But finding actual surveys associated with this has been rather difficult.

The surveys in this latter time period that we have found for alpha do not necessarily specify thorium, and they're all very -- they're cold, they're cleaned up from that standpoint. We don't see alpha activity above permissible limits, above 20 dpm per 100 square centimeters.

CHAIRMAN MELIUS: Okay, Henry and then Brad.

MEMBER ANDERSON: Just a question again about the 1970 period. Were you able to identify workers who were there during the period to see if any of them who were working in the area recall this? Because these would be kind of, I would think, specialized projects that they may be aware went on.

DR. TAULBEE: Actually, that's been one of the most difficult portions of this entire SEC, is actually finding some claims that fit the parameters here and identifying an 83.14 case. This report we actually had most part completed back at the beginning of September. But finding a claim that would fit during this time period, that had an SEC cancer, that would meet this Class, has been exceedingly difficult from that standpoint. And it wasn't until September that we actually identified someone.

CHAIRMAN MELIUS: I thought Henry was sort of asking have people who worked in the post

'70 period been interviewed. So there may be claimants that fit the Class, but also worked after that, and did they have any information on continued operations? Or I'm not sure you can answer that right now.

DR. TAULBEE: I cannot. We have not -- we interviewed a couple of people that did mention some of these '60s thorium work that we were able to find and see the evidence of. They did not mention anything in the '70s, until you get to the '82 time period.

But I mean, if more interviews were -- we could conduct them or try to identify people in that area to see if there is other thorium work in there that we don't know about. We have not done that.

CHAIRMAN MELIUS: I think it's unusual to have something, whether it's a gap of 12 years -- I mean, it's not like you know the thing stopped in '70. What we know is that you don't have any records of things from '70. Then '82 there appears to be some activity going on now.

DR. TAULBEE: Yes and no. I agree with you, to a certain degree -- or I agree with you. The difficulty here is that I also see in the late 1960s the number of mentions of thorium within the rad surveys begins to really tail off to where it does seem like they weren't doing much work with it. So, that's what we have.

CHAIRMAN MELIUS: I guess my argument would be that, well, you have a time period where there's activity and then SEC is warranted based on recordkeeping and all the reasons you laid out. But you've got this other period where it seems to me that further evaluation ought to be ongoing in terms of looking at that.

DR. TAULBEE: I don't disagree with that. I think this is a time period that we should look at closer, and as new information arises, revisit from that standpoint.

CHAIRMAN MELIUS: Brad, then Wanda.

MEMBER CLAWSON: I was just wondering, Tim, you know, a lot of these, have we looked into the AEC or DOE inventory records to see exactly what

we had and where?

DR. TAULBEE: Yes.

MEMBER CLAWSON: What did we see?

DR. TAULBEE: And what we saw was very small quantities of thorium at Battelle through the 1960s. And then according to their inventory records, nothing in the 1970s. So we did look at the inventories. However -- however -- the inventories that we looked at didn't indicate that they had any quantities during these time periods of these radiological surveys showing thorium contamination and showing thorium problems.

So, was this thorium part of Legacy or, you know, part of operations from the 1950s and people had it in their labs and were continuing to work with it? I don't know, but it does not show up on those inventories. There's not good agreement between those.

CHAIRMAN MELIUS: Wanda?

MEMBER MUNN: Most of the major sites with which we deal are production sites. And they operate on an entirely different basis than

research laboratories do. Not only do the research laboratories have much -- generally speaking, would be expected to have much lower inventories at any time than a production facility. The type of work that goes on there are handled by entirely different sets of personnel.

And the way they're funded is quite different also, as I think has been referred to here. In a research laboratory, if there are not funds for a specific, discrete activity, then it will not take place because the laboratory will not pay workers for anything other than something that can be charged out to a given contract.

And at the end of that contract, there will be a report of some kind. So, the fact that they may not have been doing work at some particular time doesn't seem unusual for a research laboratory.

In this case, I know the recordkeeping is seldom as stringent as it is in other kinds of activities. But by the same token, it's really not the same kind of activity. So, the information

that we've been given so far seems valid and not at all unusual to folks, I think, who are really familiar with how labs work.

CHAIRMAN MELIUS: Any other questions? Bill?

MEMBER SCHOFIELD: When you're talking about the inventories, are these official AEC records?

DR. TAULBEE: Yes.

MEMBER SCHOFIELD: Did they keep track of them, you know, like you would any special nuclear materials so that they know how much went into a lab, they know how much was returned from the lab, how much went into a particular project?

DR. TAULBEE: The inventories that we have are the official AEC records. However, it's not by lab, it's by site and the amount of thorium coming into the site that is there in that inventory. But the thing that we're most concerned about was the work that they did back at the early 1950s and the late 1950s of Legacy material that was just stored, say, in the

foundries or in the other areas.

That, you know, we have the numbers, but we don't know what the disposition or where it went, which is what I think ended up happening in some of the surveys indicating thorium in multiple labs. People who would get a sample here or a sample there and they're doing some sort of NDT type analysis or something on it and that's where it came from.

So it wasn't a lab-by-lab type of inventory that you see for special nuclear materials. It was more of a site type of inventory.

MEMBER SCHOFIELD: Okay, thank you.

CHAIRMAN MELIUS: Board Members on the phone, do you have any questions?

MEMBER FIELD: Yes, this is Bill.

CHAIRMAN MELIUS: Go ahead.

MEMBER FIELD: I have one question. It looks like there's less than 100 claims submitted. Do you know the total number of the workforce at the site during those years? Just curious.

DR. TAULBEE: I do not. My impression

is that it's relatively small, but I do not know the actual number of people on a per-year basis at Battelle King Avenue.

MEMBER ZIEMER: One other question. This is Ziemer again. Jim, are there any shipping records that you've been able to uncover on disposition of some of these materials, such as rad waste records or other shipments out that would impact on the inventory information?

DR. TAULBEE: I don't believe so, but I can't say that for certain. My memory is failing me here. Until they did the D&D activities, which I believe is in the late 1980s type of timeframe, until they did that, I'm not sure.

CHAIRMAN MELIUS: Any other Board Members on the phone with questions? Okay, I believe that we may have a petitioner on the line, but my understanding is the petitioner does not wish to comment. But if they do, they're welcome to. Not required to.

Okay. Do we have a recommendation or further comments or thoughts from the Board? Just

questions?

MEMBER KOTELCHUCK: I'll move that we accept the SEC.

CHAIRMAN MELIUS: Recommendation?

MEMBER KOTELCHUCK: Recommendation, yes.

MEMBER ANDERSON: I'll second.

CHAIRMAN MELIUS: Okay. We have a second from Henry. Any further comments or --

MR. KATZ: Okay, so I will take the vote alphabetically, and I'll include even some people who may not be on the line. Dr. Anderson?

MEMBER ANDERSON: Yes.

MR. KATZ: Ms. Beach?

MEMBER BEACH: Yes.

MR. KATZ: Mr. Clawson?

MEMBER CLAWSON: Yes.

MR. KATZ: Dr. Field?

MEMBER FIELD: Yes.

MR. KATZ: Dr. Kotelchuck?

MEMBER KOTELCHUCK: Yes.

MR. KATZ: Dr. Lemen is absent. Dr.

Lockey is absent. Dr. Melius?

CHAIRMAN MELIUS: Yes.

MR. KATZ: Ms. Munn?

MEMBER MUNN: Yes.

MR. KATZ: Dr. Poston, are you on the line? Okay, absent. Dr. Richardson is absent. Dr. Roessler is traveling, so you shouldn't be on the line, but are you? Okay, absent. Mr. Schofield?

MEMBER SCHOFIELD: Yes.

MR. KATZ: Ms. Valerio?

MEMBER VALERIO: Yes.

MR. KATZ: And Dr. Ziemer?

MEMBER ZIEMER: Yes.

MR. KATZ: Okay. We have sufficient votes for the motion to pass, despite the absent Members. And we'll collect the absent Members' votes after this meeting.

CHAIRMAN MELIUS: Okay. Thank you. I guess I would just add, I think it's a sense from the Board is that this site not be forgotten. That there be, you know, some sort of sense of follow-up

and so forth.

We agree with the report, and I think as Tim presented it, it was an incremental evaluation and SEC. But given the nature of the recordkeeping and what's been found so far, that there are some potentially issues there and, you know, continued evaluation and vigilance, I guess, is called for. Yes, Henry?

MEMBER ANDERSON: I'm just wondering if there's some way, since all these records and reviews are electronic now, if there's a way to put a flag that if new claims, as they come in for this site, there could be a flag for the period of time that, you know, we've been concerned here so that it would be potential people, families to follow up with, so that we wouldn't lose sight but there would be a way to alert NIOSH that there's possibly more information that would be useful, rather than think in terms of going back regularly to try to sort through it.

CHAIRMAN MELIUS: Yeah. One complication is that once you have an SEC in place,

NIOSH doesn't see the claims, unless they're non-SEC cancers.

MEMBER ANDERSON: Ah, never mind.

CHAIRMAN MELIUS: Well, no, I mean, the non-SEC cancers it would apply to.

MEMBER ANDERSON: Yeah, yeah.

MR. HINNEFELD: If we're interested in the post-'70 period, '70 to '82 period, a person who is not employed for a year before 1970 would not be in the SEC.

CHAIRMAN MELIUS: Right.

MR. HINNEFELD: So I think we can probably do that. I think we can probably have some method for checking our claimant population for potential interviewees, for instance.

CHAIRMAN MELIUS: It's a long time period, and there's memory issues also.

And we'll welcome Dr. Roessler.

(Pause.)

CHAIRMAN MELIUS: If I can find on my computer, do you have the letter?

MR. KATZ: The letter, we seemed to

have problems printing it. But what I did was, for folks on the phone, Board Members, I distributed the draft letter by email. And also for people in the room who are hooked up to the internet, I sent the letter to your email address, the draft letter.

(Pause)

CHAIRMAN MELIUS: Okay. Some of this will sound familiar. The Advisory Board on Radiation Worker Health, the Board, has evaluated a Special Exposure Cohort, SEC, Petition 00229 concerning workers to Battelle Laboratories King Avenue in Columbus, Ohio, and the statutory requirements established by the Energy Employees' Occupational Illness Compensation Program Act of 2000 incorporated into 42 CFR Section 8313.

The Board respectfully recommends that SEC status be accorded to all Atomic Weapons Employees who worked at the facility owned by the Battelle Laboratories at the King Avenue site, Columbus, Ohio, during the period from July 1st, 1956, through December 31st, 1970, for a number of workdays aggregating at least 250 workdays,

occurring either solely under this employment or in combination with workdays within the parameters established for one or more other Classes of employees included in the Special Exposure Cohort.

This recommendation is based on the following factors: individuals employed at this facility in Columbus, Ohio during the time periods in question worked on operations related to nuclear weapons production and may have been exposed to thorium and uranium.

The National Institute for Occupational Safety and Health, NIOSH, review of available monitoring data as well as available process and source term information for this facility found that NIOSH lacked the sufficient information necessary to complete individual dose reconstructions with sufficient accuracy for internal exposures to thorium, to which these workers may have been subjected during the time periods in question. The Board concurs with this determination.

NIOSH determined that health may have

been endangered for employees at this facility during the time periods in question. The Board concurs with this determination.

Based on these considerations and discussions in November 18th, 2015, Board Meeting held in Oakland, California, the Board recommends that this Class be added to the SEC. Enclosed is the documentation from the Board meetings where this SEC Class was discussed. The documentation includes copies of the petition NIOSH reviewed thereof and related materials. If any of these items aren't available at this time, they will follow shortly.

Assistance from Counsel's office on commas, petition numbers, minor things like that. But it's fine. Okay.

We have a little bit of time, unless people want a two hour lunch break, but that seems a little bit excessive. So we will move on.

And we do have to get prepared for LaVon. We know people will be back at 1:30 sharp. No one will be late. The popcorn truck will be out

front, we'll be all set. But we will try to get some of our Board work session done, part of getting prepared. If you hurry, LaVon, you can catch the train.

MR. RUTHERFORD: Right, exactly.

(Laughter.)

CHAIRMAN MELIUS: Okay. Let's do the meeting scheduling, at least start talking about it. We have a number of Board Members that aren't here. Ted's going to have to do a little follow up on this, I think. But how about location for the March meeting?

MR. KATZ: And I have just one, I did consult with DCAS folks too, and company, on that. And so one possibility, which I think we discussed preliminarily at the July or September Board meeting, I'm not sure which, was possibly doing it in Florida, because the Pinellas Site Profile work should be finished. The Work Group should have had a chance to meet and resolve those issues around that time. So that was one possibility that was mentioned. That's the Tampa, Florida area.

MEMBER BEACH: So, that one sounds good. I was also thinking that Blockson might be, I know were talking about it here but it may be that we have to look at it further. Just an idea.

MEMBER KOTELCHUCK: What are our tentative dates for that March meeting?

MR. KATZ: They're not tentative, I think they're --

MEMBER MUNN: 23rd and 24th is what we said last time.

MEMBER KOTELCHUCK: Okay, fine. Retract tentative. I couldn't find it on my calendar.

MR. KATZ: Yeah, 23rd through 24th, and possibly the 25th if we needed it.

CHAIRMAN MELIUS: So, DCAS is on schedule? For Pinellas.

DR. NETON: I'm sorry, you caught me multitasking here. We're talking about Pinellas and --

MR. KATZ: For the March, we have a March 23rd, 24th meeting.

DR. NETON: Yes. We've completed our evaluation of the Pinellas remaining issue, which had to do with the tritide exposures. And we're just about ready to release that to the Work Group for their review. So, yeah, I think, if the workgroup can come to some conclusion between now and the March Board meeting, it makes some sense to maybe go to Pinellas.

CHAIRMAN MELIUS: Who's the Work Group? I know Phil, you're the Chair.

MEMBER SCHOFIELD: I think we can cover that with a conference call.

MR. KATZ: Yeah, and it will be a priority for SC&A to review your --

DR. NETON: Yeah, one remaining issue. I believe the report is very short, maybe eight, nine pages.

MEMBER SCHOFIELD: One just quick question on that. I know you guys were looking at the washing of the filters.

DR. NETON: Yes.

MEMBER SCHOFIELD: Has that been

totally resolved?

DR. NETON: To our satisfaction, yes.

(Laughter)

MR. KATZ: So, Pinellas is filled with Dr. Poston and Mr. Clawson.

CHAIRMAN MELIUS: The only other site I was thinking of was Oak Ridge where we had lots of claims and we haven't been back. But I'm not sure that if we have a Site Profile group, Gen, that aren't you --

MEMBER ROESSLER: Do we have one?

CHAIRMAN MELIUS: I don't know if we have the information.

MEMBER ROESSLER: I don't have any information.

CHAIRMAN MELIUS: Okay.

MEMBER ROESSLER: That might be a July.

DR. TAULBEE: We won't be ready for anything with Oak Ridge by the March Board meeting from that standpoint.

CHAIRMAN MELIUS: Okay.

DR. TAULBEE: Gen, I do know I owe you

an update on where we're at with those things, and I hope to get that to you shortly. I know I owe you an update on the status for Oak Ridge.

MEMBER ROESSLER: Yeah, and I don't have one.

DR. TAULBEE: That's correct. I'm getting that to you very shortly.

(Laughter.)

MEMBER ROESSLER: Okay.

CHAIRMAN MELIUS: Okay.

PARTICIPANT: Can I ask a question just real quick? I lost my connection. Did someone bring something up but about the Pinellas Plant?

MR. KATZ: No, we're just discussing future meetings.

PARTICIPANT: Oh, I'm sorry. I got disconnected. I had problems with my phone.

MR. KATZ: No, it's quite okay.

PARTICIPANT: Thank you.

CHAIRMAN MELIUS: Okay.

MEMBER MUNN: So, location?

CHAIRMAN MELIUS: We have a location.

MEMBER MUNN: Pinellas?

CHAIRMAN MELIUS: Pinellas.

MEMBER MUNN: Thank you.

PARTICIPANT: And when will that be?

MR. KATZ: So that's probably the 23rd and 24th of March.

PARTICIPANT: 23rd and 24th of March.

MR. KATZ: Right.

PARTICIPANT: Okay, thank you. I'm sorry to interrupt.

MR. KATZ: You're welcome.

PARTICIPANT: I lost the call.

CHAIRMAN MELIUS: Now we're going out to October.

MR. KATZ: The following year.

CHAIRMAN MELIUS: Yes, 2016.

MR. KATZ: Right. So the next telecon meeting to schedule would be -- again, this is next year, of course, the week of October 3rd or 10th or 17th. That's the right ballpark. And we typically do it on the Wednesday of the week, but that's not necessary.

MEMBER ANDERSON: Earlier October is better for me.

CHAIRMAN MELIUS: Earlier is fine, but I can't do Wednesday.

MR. KATZ: Right. We don't have to stick with --

CHAIRMAN MELIUS: Tuesday or Thursday's fine.

MR. KATZ: So, how is March 4th for all the Board Members we have, 2016?

MEMBER BEACH: March or October?

MR. KATZ: I'm sorry, October 4th.

MEMBER BEACH: That's fine.

MEMBER ANDERSON: Which day is that?

MR. KATZ: October 4th?

MEMBER ANDERSON: 4th, yes.

MR. KATZ: It's a teleconference so it's just, we're talking about a couple hours.

MEMBER ANDERSON: Yes, that's good.

MR. KATZ: Is that good for Paul and Bill and others on the phone?

MEMBER FIELD: It works for me. It's Bill.

MEMBER VALERIO: Works for me. Loretta.

MR. KATZ: Loretta. And Paul? Paul, is that good for you, October 4th, 2016?

MEMBER ZIEMER: Yeah, I'm trying to get off of mute here. Yes, I'm good. Thanks.

MR. KATZ: Okay. So let's go with that, unless it's trouble for all the absent Board Members. I don't know, if you want an alternate date because we don't have those Members, so the 5th is no good. How about October 6th, does that work for everyone, too? Anyone on the line, as an alternate date?

MEMBER VALERIO: Yes, yes.

MR. KATZ: Okay.

MEMBER ZIEMER: Yes.

MR. KATZ: Very good. So 10/6 will be the alternate date.

CHAIRMAN MELIUS: Okay. And then we have a full meeting. And Ted's proposed the week

of --

MR. KATZ: Of December 5th or December 12th. That's about the right ballpark again. I heard Gen say something about awful.

MEMBER ROESSLER: December's awful.

CHAIRMAN MELIUS: December's awful.

MEMBER ROESSLER: The earlier the better, though.

CHAIRMAN MELIUS: I'm not available the week of the 4th. And the following week makes --

MR. KATZ: That's the last week you could do it.

CHAIRMAN MELIUS: That's always terrible.

MEMBER BEACH: What about the very last week of November?

MR. KATZ: Oh, we can. That could be trouble for people, too.

MEMBER BEACH: Because it's the week after Thanksgiving.

MEMBER KOTELCHUCK: So, the week of December 5th, is that the best solution?

MEMBER BEACH: No.

CHAIRMAN MELIUS: I have another meeting.

MEMBER KOTELCHUCK: Oh, oh, okay.

MEMBER MUNN: It's not feasible. But --

MR. KATZ: So look at the previous week in November.

MEMBER MUNN: November, the 29th or 30th? Or the 30th and 1st of December?

MEMBER ANDERSON: Right now that looks fine.

CHAIRMAN MELIUS: So 11/30 and December 1st?

MR. KATZ: How about on the line? 11/30, December 1?

MEMBER FIELD: Yes, works for me. Bill.

MEMBER ZIEMER: I'm good. Ziemer.

MR. KATZ: 11/30, December 1. Okay,

so let's --

CHAIRMAN MELIUS: Brad can call in from the woods.

MR. KATZ: Fish in hand, right. Okay, so tentatively 11/30 and December 1 for that Board Meeting, face-to-face. Very good.

CHAIRMAN MELIUS: You know, Brad, many fish species are endangered. Don't you think we should come to the meeting and --

MEMBER CLAWSON: No.

MEMBER ANDERSON: Of course we could do a subcommittee to go with you.

CHAIRMAN MELIUS: Call it the Fishing Work Group. Why do we have to have one location for a meeting? Isn't that, you know, multiple locations.

(Pause)

CHAIRMAN MELIUS: Why don't we go ahead and do the public comments, which everyone should have a spreadsheet that lists them. And then the transcripts, I believe, that came out after the --

MR. KATZ: Right, they came out

afterwards. And much thanks, Josh, for that follow-up.

CHAIRMAN MELIUS: So I will go through these relatively quickly because I think they've all been responded to.

The first piece, again, from our July meeting, the first two are from related to Carborundum site. And we have questions that came out about dose reconstruction methods being used there, and I think those have been referred to NIOSH and essentially responded to.

We had some additional questions about the whole series of questions on INL, numbers three through at least twenty, that came in, most of which were referred to Tim Taulbee for response and follow up. A number of them were just comments and didn't really require a response.

One of them was question about the naval reactor program, which is really not covered by this program. Some issues, difficulties, with sort of dose reconstructions there I think have been followed up on, people have been talked to

fairly detailed.

There are a number of comments related to Rocky Flats, from a person who's familiar with that, that have been followed up by Jim Neton and LaVon Rutherford. I think also, as I understand, with the Work Group also. That's comments number 22 through 30 here.

Again, I know there's some further comments related to the FBI investigation there. And again, Jim and LaVon have followed up on those. And I believe the Work Group has done further work on that.

That takes us up through number 40 basically, the whole series of questions. But I think they're all essentially comments that have been noted or being followed up on. So I think that's appropriate.

Anybody have questions on the comments or wish -- flagged any of them, wished to look back at the transcripts, since you just got the transcripts a couple days ago? But they're all pretty straightforward in the processes.

Yeah, Dave?

MEMBER KOTELCHUCK: On the Rocky Flats, I mean, the Working Group has all of these and will be dealing with them, but hasn't dealt with several of them yet. But they're coming. Our consideration of them is coming.

CHAIRMAN MELIUS: I was trying to use present tense. We're considering.

MEMBER KOTELCHUCK: Yeah.

CHAIRMAN MELIUS: Why don't we do -- since it's easy to categorize these, our two Subcommittee Chairs, can they give us updates? And we'll wrap up this session.

MEMBER MUNN: I would suggest that the Procedure Subcommittee go first, simply because we have not met and do not plan on meeting for at least another month, or probably a little more. We're waiting for material to be ready for us to deal with. And when we have an appropriate agenda, we'll move forward. We haven't met for several months, but it's simply because material's not ready for us.

CHAIRMAN MELIUS: Dave?

MEMBER KOTELCHUCK: The Subcommittee met on the 24th. And we are going to meet again on the 1st, December 1st. And we will focus, as I said before, on discussion of some of the issues raised in the Methods Subcommittee.

And there was a discussion about a meeting in January. I think that, talking with people here and thinking about the dates, I would hold off on any meeting for the Subcommittee on January, and let's await consideration after this meeting as to our next meeting after December 1st.

But we're working. And we will, in the December 1st meeting, also discuss the blind reviews and our procedures for selecting them and the numbers of them.

CHAIRMAN MELIUS: I've got two questions. Do you have a little bit more information on the draft letter to the Secretary, where that stands?

MEMBER KOTELCHUCK: I've written a draft of the Subcommittee activities aspect of the

report to the Secretary. We have not discussed that in committee. And I'm going to make one or two revisions that, corrections, that will be coming up at the meeting. And I'll make sure that those are sent to everybody on the Subcommittee and to the Chair.

So that, I think, takes care of that. I'm curious, the letter to the -- the report to the Secretary involves, I assume, a number of different operations, one of which, an important one of which, is the activities of the Subcommittee. But what about, I ask the Chair, what about the other, our other activities decisions on SEC, procedures, are those also coming along?

CHAIRMAN MELIUS: I think that those can be added. What I would suggest we do is get the -- got another chance to leave, LaVon, another train. But you're meeting in early December.

MEMBER KOTELCHUCK: We're meeting December 1st.

CHAIRMAN MELIUS: I think get comments from the Subcommittee. Make any, you know,

drafting changes. And I think let's circulate it to the entire Board, the current draft, and then let's, at our Board call, which I believe is January, that we have some discussion of that. Not commas and, you know, grammatical but substantive. Are there changes and then let's talk about what needs to be added.

MEMBER KOTELCHUCK: And then with that report, we'll send out the graphs done by SC&A, which play an important role in that write-up.

CHAIRMAN MELIUS: Yes. Board Members need to see the data.

MEMBER KOTELCHUCK: Yes, they do.

CHAIRMAN MELIUS: That affects this.

MEMBER KOTELCHUCK: And that was, I should say, on behalf of the value of those graphs that they were very helpful to me as Chair, and I'm sure to other people, to sort of look back and see.

For example, we've been able to look in the last years at 0.86 percent of the cases that we've selected and gone over. And it is important and useful to find out how well the different plants

are covered and whether AWEs, which tend to have fewer cases, considered whether we've covered them.

And my general impression is that the coverage has been better than I might have expected, which also means that prior to my chairing the Board, we did a number that were preserved. So, we've overall preserved the balance.

CHAIRMAN MELIUS: And my second question is, can you update us on where you are with resolving the -- resolution process for the cases that have been reviewed already? We were behind, and the point of this question is we basically have stopped the process of reviewing new cases. No longer referring cases to review to SC&A. And the idea of that was until we got caught up with the backlog, so to speak, and secondly to look at what our methodology is. And so I'm trying to ascertain where we are in terms of the backlog.

MEMBER KOTELCHUCK: Okay, good. I think that we were working actively, if not

furiously, on trying to get Sets 10 through 13 done. I mean, I came in as Chair in the middle of 10 through 13, and felt an imperative to get that done so we can move on.

Then, after we finished that, we spent one meeting and possibly a second discussing parts of Set 14, a couple of cases, and then pretty much refocused on the blind reviews. Now, the blind reviews have been coming in much more rapidly now. I mean, not only were we able to go over some of the blind reviews from before 13 and before, but we've now gotten blind reviews from SC&A to match NIOSH reviews for Set 20.

And so, you know, we have 14 blind reviews done now. The corollary of that is that we had stopped for the last couple of meetings -- two meetings, I believe -- moving further on 14 through 20 and 21. And, as Chair, I'm aware of that and we will try to get back to resuming that.

But I will say that our priority, I think, has to be the consideration of strategy and changes in our methodology for the Secretary's

report. So I would say that -- and I see that that will take up most of the time in the next Subcommittee meeting.

So, yes, we are aware and we will try get through it.

CHAIRMAN MELIUS: It's not meant as a criticism or even a prod, it was just informational so we know what's going on. And I don't think anybody, at least the Board doesn't disagree with the priorities that have been done and the blind reviews we needed to get caught up with.

MEMBER KOTELCHUCK: I didn't take that as a prod. But internally, I feel guilty.

CHAIRMAN MELIUS: I didn't want to increase your stress. It wasn't meant that way.

MEMBER KOTELCHUCK: Right.

CHAIRMAN MELIUS: Yes?

MEMBER ANDERSON: Just how long are we expecting this report to be?

CHAIRMAN MELIUS: I don't know.

MEMBER ANDERSON: I'm just thinking in terms of reviewing it over the holiday to be ready

for the January --

MEMBER KOTELCHUCK: Well, the previous report was 13 pages.

CHAIRMAN MELIUS: I think, you know, it's not long and I think it's, again, big picture stuff, not --

(Simultaneous speaking)

CHAIRMAN MELIUS: -- what else would you like in the report kind of thing. I mean, what do we need to add that would be more work and take time to do. I mean, my recollection of the initial report to the Secretary is we beat that poor letter to death, Board meetings.

And I can't even remember what we -- what took us so long to resolve, but it took quite a while to work that out and so forth and trying to make sure we identify at least, again, bigger issues and things that require more data or something before we get too far along in the process so that we can hopefully be a little bit more efficient this time.

MEMBER MUNN: Less semantics, more

policy.

MEMBER KOTELCHUCK: Well, certainly the draft I've written is primarily on what has happened. The hard part, it seems to me, is what we're going to do in the future, which is the topics that we're going through now.

MEMBER ZIEMER: Could I make a couple comments, too? Ziemer here.

CHAIRMAN MELIUS: Sure, Paul. Go ahead.

MEMBER ZIEMER: Just a reminder. There are some specific requirements on this as to what we're to report on. Those are found in the legislation itself, Section 3623(b) of the EEOICPA Act. And it's spelled out in 3624(b). And those specifically say what we're to advise on on this, I mean, dose reconstructions. There's some specific language there, and I think we need to tie our report to that language.

MEMBER KOTELCHUCK: Yes. I primarily used the first report to the Secretary as a model, and then covered a number of the items there.

CHAIRMAN MELIUS: Thank you, Paul. And I would just add that the first letter, the first report, took a while to resolve because it was the first report and the case review process was sort of a work in progress at that time.

There were lots of changes that took place early on in terms of how we went about doing that, how we selected cases and so forth. So I think it was, in some ways, a more difficult report to write.

But this one, we just procrastinated on starting. So, for whatever reasons, and I'm hoping it won't be as complicated and prolonged as the first one.

MEMBER KOTELCHUCK: As with raising children, the first one is the hardest.

CHAIRMAN MELIUS: I'm not sure where we want to go with that analogy.

(Simultaneous speaking.)

CHAIRMAN MELIUS: So we will take a break and return at 1:30 sharp. And presenting at 1:30, LaVon Rutherford, if he's still in town.

(Whereupon, the above-entitled matter went off the record at 11:45 a.m. and resumed at 1:36 p.m.)

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

(1:36 p.m.)

MR. KATZ: Welcome, everyone, back from lunch. We're about to get started again. Let me, in doing that, let me check on the line for our Board Members. See which Board Members we have on the line.

(Roll call)

MR. KATZ: Let me remind people who might be listening in that we have a public session this afternoon. That begins at 5:00 p.m. And we'd love to hear from some people. Both in person and on the phone.

And with that, Dr. Melius.

CHAIRMAN MELIUS: Welcome, Nancy. We're glad you made it through the door. Good introduction to our next speaker.

Anyway, we'll next have our SEC Petition Status Update from LaVon Rutherford.

MR. RUTHERFORD: Thank you, Dr. Melius.

CHAIRMAN MELIUS: You know, if you do

a good job we'll give you longer time next time.

MR. RUTHERFORD: Okay.

CHAIRMAN MELIUS: You're down to 15 minutes. That's Stu's doing, don't blame us. But, you know, we'll lobby for you. But you do have more time later I noticed.

MR. RUTHERFORD: Yeah, yeah. I'm going to give the Special Exposure Cohort petition update. You'll get an SEC summary first to summarize the number of petitions we got and so on. We'll go through the petitions and qualification. Petitions under evaluation at NIOSH. We'll talk about petitions currently under Board review. And then potential SEC petitions 83.14s that we may find. Or have found.

So, our summary today, where we're at, to-date we're at 229 petitions. We have two petitions in the qualification process. We have two petitions in the evaluation process. And we have 11 petitions that are in some phase with the Board, Advisory Board.

The two petitions that are in the

qualification phase. We have a petition, Rocky Flats petition, for all employees from 1984 to 2005. Those of you that will probably remember, we already have an existing open SEC petition evaluation. And the issues that have been identified by this SEC 227 are issues that were currently working under the existing evaluation. Therefore, it's likely this petition will not qualify. In fact, we have issued a proposed finding that it does not qualify.

SEC 228, Y-12. This petitions' been in qualification for a little while. We've run into a little snag. The petitioner has requested a classified interview to go over some things. And so we're working on setting that up right now.

So, petitions under evaluation. Lawrence Livermore National Lab. We've had this petition for a while. I will be doing an update later on in the day. I'll talk a little bit more about that.

Argonne National Lab West, SEC 224. Dr. Taulbee's been working on that one. And we

expect that to be completed in February for the March meeting.

So, currently under Board review. We have Kansas City Plant. That petition is going to be discussed at this Board meeting.

Idaho National Lab. I know there will be an update on that one, as well, at this Board meeting.

SEC 223, Carborundum. We presented at either the last Board meeting or the Board meeting before. I can't remember for sure. I know that this one has been sent to a Work Group.

SEC 225, Blockson Chemical residual period. That will be discussed at this Board meeting.

And SEC 229, Battelle King Avenue. That was discussed earlier this morning.

These are all petition evaluations that are with the Board for their initial Board action.

Now, this is actually not three. This is actually six different petition evaluations that still have some phase that we'll continue to

work on, a phase of petition evaluation.

Fernald, 1984 to 1989. I think they're getting real close on that one.

Los Alamos National Lab. I went out for a data capture at Los Alamos National Lab just a few weeks ago, and I think we got a lot of good information. And I think we'll be able to tie this one up relatively quickly.

Rocky Flats Plant. We have some more issues. And I know we'll be discussing this one a little more in detail tomorrow morning.

Sandia National Lab Albuquerque. Again, this is one of the evaluations that is in the 10 CFR 835 era. So we are taking a similar approach that we've taken with the Los Alamos National Lab in reviewing that one. And it's currently being worked.

Santa Susana. Again, we have 1965, this one year we still haven't taken action on. We're still under some coworker issues that we're working through right now on that one.

And then Savannah River Site.

So, potential 83.14. Sandia National Lab Albuquerque, 1945 to '48. These haven't changed since the last few years. We've had these on our plate as potential 83.14s. This is the old Z Division for LANL. But currently it's already being included in the SEC, so that we haven't gotten any litmus claims to move it forward.

And then the Dayton Project Monsanto. We had a change in designation. Change to a DOE facility. And there was an added nine-month period when operations were being shifted from the Dayton Project to Mound. We have no claims at all for this one as well. As soon as we get a claim for that one, we'll move an 83.14 forward.

And that's it.

CHAIRMAN MELIUS: Yeah, Dave?

MEMBER KOTELCHUCK: On the Rocky Flats. It originally was asked for up through '89. But when we accepted it, went for evaluation, the Board extended that to 2005. Just for the record.

MR. RUTHERFORD: Okay.

CHAIRMAN MELIUS: Other questions?

Comments? Any Board Members on the phone have questions for LaVon?

MEMBER ZIEMER: No questions here.

CHAIRMAN MELIUS: Okay. Okay. I guess we'll save the questions for the next presentation.

Now we're going to switch to two Site Profile review updates to do. So the first one I think should be relatively quick. And Jim Neton is going to give us an update on the Dow. What we refer to as the Dow Madison. Dow Chemical Madison, Illinois Site Profile.

We had a few Site Profile issues. We already dealt with the SEC and other issues there. There was a few that that were left over that the SEC Review Work Group dealt with, actually several months ago. And then there's a few follow-up issues that Jim Neton took care of and followed up with communications. And so I think we should be able to close this out.

DR. NETON: Okay, thank you, Dr. Melius. I'm going to talk about the Dow Madison

Site Profile review. It was a focused review that was done by SC&A.

The Work Group held a teleconference on May 27th, 2015, to discuss the findings that SC&A had on that Site Profile. There were only two findings and five observations that were identified during their review.

The first finding related to the resuspension factor that was used in the residual contamination period. And after some discussion, after we had pointed -- they thought that it should be one times ten to the minus five because it was during operations, just after operations. Or, no, it was actually during production, is what we used it for. But there was some indication in the documentation that the contract required cleanup of the material every 28 hours. So material was cleaned up.

And because of that, we felt that one times ten to minus six resuspension factor was adequate. SC&A eventually agreed with that, and that issue was closed during that teleconference.

The second finding was actually a finding on TBD-6000. Which is, you know, the main document driving Dow Madison Site Profile. The Dow Madison Site Profile is Appendix C in the TBD-6000. The finding was on TBD-6000. It was not used at all in the Site Profile. Once we pointed that out, SC&A agreed that that was not a finding against TBD-6000 and that issue was closed.

We did subsequently transfer that finding, though, to the TBD-6000 Work Group. It is now in the Board Review System. And as indicated there, that does need to be closed. It's an issue that is a no-brainer, I think. The calculation that was done there was never used in any site. It was there as sort of an example. And it actually ended up using the volume by 24 hours per day twice in the calculation. And the number is obviously wrong. But has never been used. We just need to remove it from the TBD-6000.

So that finding is still open, but it's actually now part of the TBD-6000 Work Group issues to deal with.

The observations were just that. They were observations. They were mostly administrative in nature and were closed after discussion with the Work Group. Although SC&A did bring up two concerns that were sort of related to the observations but not really contained in the observations.

CHAIRMAN MELIUS: To be specific, John Mauro brought them up.

DR. NETON: John Mauro brought them up. That's correct. And --

CHAIRMAN MELIUS: Let's give credit where credit is due.

DR. NETON: During the call I committed to reviewing them because I wasn't prepared to discuss the issues that were raised.

I issued an email to the Work Group on June 4th of 2014, or 2015, that summarized our position on them. And sent them, distributed them to the Work Group and SC&A. And received no comments back, other than from Dr. Melius, that he concurred with our discussion and description of

those issues.

And that's where it remains. I believe they're all closed now.

CHAIRMAN MELIUS: And I reminded the Work Group, other Members of the Work Group, that if they had comments or concerns about those issues, to let Jim know, let me know so that we could close these out.

So it's relatively straightforward to deal with. And I don't know if any other Work Group Members have comments or concerns? Okay. Do we need to do a vote on this?

MR. KATZ: To close it out, we should.

CHAIRMAN MELIUS: Okay. So I think the Work Group actually voted to close these out pending Jim's clarifications, which we've accepted. So we have a motion from the Work Group already. So we'll do that.

And I don't think there's any further questions or discussion. If not, we'll do a vote.

MR. KATZ: Right. And normally we do these by voice, but since we're split, some Members

on the phone.

(Off record comments)

CHAIRMAN MELIUS: So we have a motion. And all in favor say aye?

(Chorus of ayes)

CHAIRMAN MELIUS: Opposed? Not hearing opposition, so.

MEMBER SCHOFIELD: Are they on the phone?

CHAIRMAN MELIUS: Well they were there.

MR. KATZ: They're on the phone. We have a quorum.

CHAIRMAN MELIUS: Yes. Well, they're on the phone, they could have --

MR. KATZ: Right.

CHAIRMAN MELIUS: -- you know. But okay. And, John, you'll inform Mr. Mauro that we took care of his, you know, post hoc observations after the, post-review observations. But that wouldn't be John, if he didn't do those. So okay.

Our next Site Profile Review, a little

bit more involved, is General Steel Industries in Granite City, Illinois. And, Paul, I believe you are going to present this also?

MEMBER ZIEMER: Yes. And I am assuming that you can put the slides up from there remotely, since I'm not onsite with you there.

CHAIRMAN MELIUS: Okay.

MEMBER ZIEMER: Maybe one of the Work Group Members can advance slides for me as needed. Josie or Wanda.

MR. KATZ: Stu is pulling them up.

MEMBER ZIEMER: Okay. I'll wait just a moment till those slides come up. Okay, there they are.

CHAIRMAN MELIUS: Our DCAS director, audio, visual technician.

MEMBER ZIEMER: Right. Okay, so this is actually the TBD-6000 Work Group.

(Laughter.)

MEMBER ZIEMER: Okay, let me know when you're ready.

MR. KATZ: Okay. Okay, Paul, we're

ready. Thanks.

MEMBER ZIEMER: Okay, so this is a report of the TBD-6000 Work Group. And the focus is on General Steel Industries, which is Appendix BB. And we're dealing with the findings for Rev 1.

So next slide. Just to remind you, the Work Group Members, Josie Beach, Wanda Munn, John Poston and me comprise the Work Group.

I also should mention, I believe that for SC&A, that Bob Anigstein is on the phone, I hope. And also for --

DR. ANIGSTEIN: Yes, I am.

MEMBER ZIEMER: Thank you, Bob. And for NIOSH, Dave Allen. Dave, are you on the phone? I didn't hear earlier whether Dave was, but --

DR. NETON: Dr. Ziemer, I'll be representing Dave Allen.

MEMBER ZIEMER: Jim Neton will represent NIOSH then. So after I finish the slides, and if there is any really difficult technical questions, I'll feel free to refer them

to either Jim or to Bob Anigstein.

So I'm going to start with some background information. And I'm only going to go back to the earlier part of this year. Well, actually middle of last year. We'll go back that far. Which was when Appendix BB Rev 1 was issued.

The date on the document is June 6th, the release date was, I guess that it's actually on the 23rd.

And I just enumerated documents or responses that the Work Group had in hand to work with as we met on Rev 1. These are in the order that they were received.

First of all, from the co-petitioner Dr. McKeel. Reviewing comments dated July 21st.

SC&A submitted their initial review on October 29th. That was actually replaced by a later version, which had some, I believe, some corrections.

And on December 10th of 2015, the SC&A review included ten findings. Then the Work Group met by phone on February 5th to deal with the

findings and concerns. And six of the SC&A findings were resolved by the Work Group at that meeting.

Also, as a matter of interest, NIOSH and NIOSH DCAS notified the Work Group on February 20th that they were going to proceed to issue a PER for Appendix BB Rev 1, even though there were some open findings.

Apparently, the reason for that is that NIOSH believed that the resolution of the four findings might take longer than they originally anticipated. And so since the resolution of the open findings might take a while, they went ahead with the PER.

And we can advance to the next slide. I just want to mention a couple things. So the TBD-6000 Chair reported to the Board on March 25th that the PER had been issued and that the Work Group would continue to deal with the unresolved findings as soon as NIOSH DCAS provided their response to those findings.

And I just want to point out that I'm

not going to speak at all to the PER at this meeting. I guess if there are questions on that, the Board Members can direct those to Dr. Neton.

So NIOSH issued their White Paper, a discussion of the four open items, on July 10th of this year. Following that we received the following documents, which I have enumerated here.

First from co-petitioner McKeel. A critique of the NIOSH document. And that was dated July 19th.

Site expert John Ramspott also provided a review of the document dated, his review dated July 23rd. We had the SC&A review of the document issued on September 15th. And then the Work Group met by phone earlier this month, November 3rd, to deal with the four open issues.

Next slide. So there's an issue matrix that was provided for us by SC&A. And I believe that also has now been distributed to the Members of the Board. So you have copies of that to refer to.

The matrix, the latest version, is

dated November 13th. So it's just been out a few days. And you have that available to look at further details in terms of this report. That includes all the SC&A replies and the previous actions taken on the other matrix issues.

And the details on those issues, I'm not going to give all the details here, but I just ask that the Board Members refer to those for detailed information if they need it.

First of all, I'll remind you that this was reported to you in February. Issues one, three, four, seven, eight and nine had been closed by the Work Group. And that was reported at the Board meeting in February, February 5th.

So issues two, five, six and ten, those issues were closed by the Work Group at the November 3rd meeting just a couple weeks ago.

But the final resolution on those actions, it's all detailed in the matrix. But since those items require more extensive debate, I'm going to summarize them here for you so you have a feel for what they have covered and what they

entailed.

So we'll go through each of those. First of all, issue two, which is called beta dose to the skin of the betatron operators.

In the -- I refer you to the matrix for the details, but I'll just -- I'm just going to summarize it in a few words here. The issue deals with exposure scenarios related to beta doses from irradiated uranium steel. Especially in terms of activation products that are produced as a result of short and long exposures of those two metals.

And there's two parts to that. First, the skin doses from uranium and the skin doses from irradiated steel.

For the uranium, NIOSH calculations were based on assuming a continuous irradiation of uranium. But as the document was critiqued, SC&A used an analysis that was based on an intermittent exposure model of the irradiated material. That should say steel there.

They suggested a more realistic model that uses the MCNPX calculational approach. And

it simulates the photoactivation of the material from the high-energy particles.

And the other issue on skin dose is from irradiated steel. SC&A verified the NIOSH model. And SC&A, their estimate was slightly lower. Between zero and one percent lower due to some slightly different calculations of the betatron beam intensity.

But the bottom line here is, NIOSH agreed to use the updated SC&A estimates, which is the intermittent exposure for the uranium. And the Work Group concurred with that suggestion.

Then on issue five, which is entitled adding betatron operator dose to radium radiography dose. Basically the issue here deals with assumptions on the times allocated for subject radiographic setups and exposure, both for radiography done with radium and radiography done with betatrons.

The NIOSH position originally was that they assumed a setup time of 15 minutes between shots or 15 minutes per shot times ten shots per

shift, which gives 150 minutes of shot setup time per shift. Or two and a half hours per shift of setup time.

And they assumed that the radiographic exposures were 2.4 hours per shift, as you see there. And then that left maximum time left for work in the betatron is delineated there. And it comes out to 38.75 percent.

And the assumption is that the same person performed all the uranium radiography. And this is sort of what you might call bias.

Now, let's continue on the next slide which is a continuation. So SC&A recommended, sorry that you hear my clock chiming in the background. It's chiming the hour, so I hope that doesn't cause too much background noise.

SC&A recommended that the time assumed for the betatron work be 60 percent, rather than 38.75 percent, a somewhat more conservative estimate.

Now the Work Group, after discussion, recommended that the value be 50 percent, which is

a little bit below the SC&A recommendation and higher than the NIOSH, leaning towards the SC&A side.

This is an assumption. And it's thought by the Work Group to be conservative but plausible.

NIOSH proposed adding the full-time beta operators' doses, prorated for the fraction of the time spent in the betatron building with the radium radiographer doses, and proposed that the radiographer performed all of the uranium radiography in a given year with the remaining time in the betatron building.

So that was more conservative than the NIOSH proposal. But after the discussion, the Work Group accepted the NIOSH recommendations and SC&A concurred with that final recommendation.

Okay, issue six. Layout man beta dose. This deals with the assumption relating to the times and distances. And their assumption to times and distances involved to assess skin doses from irradiated steel for workers setting up the

casting.

So the NIOSH position was all castings were irradiated intermittently, that the layout man spent 15 minutes on freshly irradiated castings or ten percent of his shift, and the same amount of time on each casting, whether they're long or short, ninety percent of time on short shots, ten percent on long shots.

SC&A said that they accepted the NIOSH model as bounding and claimant-favorable except for the number of long and short shots. So there was discussion on that.

They suggested that the model should consider more long shots to mark up. They proposed that 25 percent of the exposure time was the long shots and the remainder to short.

And NIOSH agreed that that more-conservative proposal was both plausible and agreeable. And the Work Group approved that.

And then issue ten, called beta operator gamma dose. The issue here was that NIOSH assumed the hands and forearms were shielded by

torso 50 percent of the time. SC&A recommend that we assume 100 percent exposure to the hands and forearms as a bounding value.

NIOSH, their response was that the beta operator photon exposure was only used for doses to the skin of the hands and forearms. And that certainly was confirmed.

They thought it was a plausible assumption that the hands and forearms were exposed only half the time. The remainder of the time they might be shielded by the body.

SC&A pointed out, and this is a photograph that was available. I believe, I don't recall if it was from the site expert or from the co-petitioner, but a photograph from GSI showing the betatron operator holding his left hand and forearm above his shoulders and right arm at his sides and so on. And SC&A suggested that NIOSH should assume the hands and forearms were exposed full time.

And they recommended that the skin dose to the hands and forearms be shown there. 6.687

rems per year, which is based on 10.225 rads and the rem per rad conversion.

Final resolution was that the Work Group voted to accept the SC&A assumption, which is the 100 percent value. And NIOSH agreed to that.

And so the final slide simply summarizes the Work Group's recommendation that the Advisory Board accept the resolution of issues related to Appendix BB Rev 1, and that NIOSH proceed to prepare Appendix BB Rev 2. And that represents a motion from the Work Group.

And I think we're open for questions at this point. Either technical questions or procedural questions.

CHAIRMAN MELIUS: Okay, thank you. Any other Work Group Members want to make comments?

MEMBER MUNN: It's a good summation.

CHAIRMAN MELIUS: It was an excellent summation. A lot of information, a lot of review. Yes. Any other Board Members have questions or comments? Or Board Members on the phone?

MEMBER FIELD: This is Bill. Even over the phone it was a great summary. Thank you.

CHAIRMAN MELIUS: Yes. No, no, Paul, you should really be commended for, one, an excellent, preparing an excellent summary and then being able to give it so well over the phone. It's not --

MEMBER ZIEMER: Well, there's much more detail in the matrix itself. So it's hard to capture all the nuances here in this kind of a summary.

But the Work Group spent a lot of time. And we have excellent input from both the co-petitioner and the site expert and other Work Group Members.

Some of the issues still are very difficult, I know, for everyone. But anyway, that's where we're at.

CHAIRMAN MELIUS: Okay. If there are no further questions or comments, I think we'll ask for a vote on accepting the Work Group's recommendation. Closing out these Site Profile

issues and accepting the recommendation from the Work Group that's on the screen now.

All in favor say aye?

(Chorus of ayes)

CHAIRMAN MELIUS: All opposed? Abstain? Okay. I guess we have some abstentions for this.

Very good. Thank you again, Paul. That was a lot of hard work for you and the Work Group and NIOSH and SC&A. We thank everybody involved in that. Not that there isn't more work to be done at this point.

Okay, we now have a Board work session. And I'll start with our first Work Group, which is staffed by low-bid Rutherford --

(Laughter)

-- who will be going to the Amchitka Work Group.

LB Rutherford will be, I understand, spending January, February, March and probably into July in Amchitka doing some additional data collection and so forth to prepare the Work Group.

So, Mr. Hinnefeld and I worked that out.

MEMBER MUNN: It's peaceful there.

MEMBER SCHOFIELD: In the dark.

CHAIRMAN MELIUS: So going to the next Work Group on the list, the Ames Laboratory.

MEMBER KOTELCHUCK: Right.

CHAIRMAN MELIUS: Yes.

MEMBER KOTELCHUCK: Dave. We were supposed to -- basically we were to get several reports from Tom Tomes from NIOSH. Do I pronounce it right, Tomes? Thomas?

MEMBER MUNN: Tom Tomes.

MEMBER KOTELCHUCK: Tomes. Okay. And we were supposed to get them in July. Things have been delayed.

We recently received an email, which I sent other Members of the Subcommittee within the last week, saying that they, he did not get the data that he had hoped for in his request. And so he's going to spend some more time getting further information, further data.

There is one report that he has given

to us. And I'm trying to remember what that one was. We have not reviewed it because it was one of four to be -- thank you very much -- on the intake of uranium. Thanks. And that was completed in the summer.

So we're basically delayed. And he has three more papers coming. The thorium intakes, the internal and external doses at the synchrotron, and the fission product intakes on the main campus.

We don't have a prospective delivery time for those because he's basically waiting for the data. So really not much progress. But Tom is clearly working on it. They're just data problems.

CHAIRMAN MELIUS: Okay. Has SC&A not reviewed that initial report? The one --

MEMBER KOTELCHUCK: No, I'm sorry. SC&A has reviewed that report, if I'm not mistaken.

MR. STIVER: Yes, we reviewed and delivered it. I believe it was September 8th.

MEMBER KOTELCHUCK: Yes.

CHAIRMAN MELIUS: Okay.

MEMBER KOTELCHUCK: Yes. So there we are. So we haven't met in a long time.

CHAIRMAN MELIUS: Is it worth it? And again, this is just a question and not a suggestion, but is it worth it for the Work Group to meet, review the -- to resolve? I don't know what issues were found in the SC&A review. If it makes any sense to --

MEMBER KOTELCHUCK: Well, if we have -- it can be done. My feeling was if we have four reports, at least wait for a couple of reports. I was hoping that we'd get something by September. And now it's clearly been delayed significantly.

It is up to the Board. My sense was that we should wait for at least one more report. But we can certainly do, we can certainly do that.

CHAIRMAN MELIUS: Jim Neton, you looked like you were about to say something and then you --

DR. NETON: Well, I was just going to say, this is a Site Profile Review and there's already an SEC for this time period.

CHAIRMAN MELIUS: Yes.

DR. NETON: And we're unlikely to change a Site Profile until we resolve all the issues. We don't normally, you know, modify the Site Profile on a piecemeal basis while we're under, you know, we're under discussion on these issues.

CHAIRMAN MELIUS: I think my question was more if there were significant issues found in the --

DR. NETON: Well, that's --

CHAIRMAN MELIUS: -- SC&A review that would require more data from the site than it --

DR. NETON: That's a good point.

CHAIRMAN MELIUS: -- would be --

MEMBER ANDERSON: Better sooner than later.

CHAIRMAN MELIUS: Yes. Why put it off?

DR. NETON: That's kind of part of the issue. My recollection was that SC&A largely agreed with us on our approach to reconstruction

of the uranium and doses.

MEMBER KOTELCHUCK: Yes.

CHAIRMAN MELIUS: Okay. Then that's different. That's all. I'm just trying to keep these things moving if it's appropriate.

MEMBER KOTELCHUCK: Sure.

CHAIRMAN MELIUS: But again, I'm not trying to bog everybody down with lots of meetings.

The next Work Group is Blockson Chemical, which is alive. And, you know, maybe by tomorrow may have a new task. Can't wait, can you, Wanda?

MEMBER MUNN: I might.

CHAIRMAN MELIUS: Get back together with Brad and I and Gen.

MEMBER MUNN: You bet.

CHAIRMAN MELIUS: We had some fine meetings on Blockson. Yes. Felt like a reunion.

MEMBER MUNN: Yes.

CHAIRMAN MELIUS: Brookhaven.

MEMBER BEACH: It looks like the only thing I have is the TBD revision was expected this

year. Now it looks like it's pushed back to February of next year. So no report other than that.

CHAIRMAN MELIUS: Okay. Carborundum, Gen?

MEMBER ROESSLER: I think the status is that SC&A, it's in your hands?

MR. STIVER: Yes. This is John Stiver. We're in the review process right now and should have it delivered about the third week of January, if not sooner.

CHAIRMAN MELIUS: Fernald?

MEMBER CLAWSON: We haven't done that much on Fernald. We're still finishing up, as I said earlier today, they've got some years that they're looking at, I believe, for mass low bid.

Anyway, some SEC, be able take some look at some years. But we're still finishing up some of the Site Profile issues.

MR. HINNEFELD: Yes, this is Stu. I just wanted to offer that we have some updates that didn't make it onto our coordination, work

coordination document this time.

We have revised the uranium coworker approach to incorporate the time-weighted average, one person-one statistic approach. And that document is on our website. So that has been revised.

And then the two remaining revisions are for the environmental TBD chapter. Because a portion of the issues we talked about were environmental. And then the internal dosimetry TBD issues, or TBD chapter, because the remaining issues would fit into that.

We have right now an estimated completion on the environmental TBD of January. And an estimated completion of the internal TBD in April.

And we have a number of documents that sort of provide the supporting calculations for the decisions that went into those that address the issues that were remaining.

So when we have those documents ready to review, we'll make sure we point to those

supporting calculation documents, as well. So they'll be available for SC&A and the Work Group to review at that time.

MR. KATZ: Okay.

CHAIRMAN MELIUS: And if one of these documents is now ready, do we want to task SC&A?

MEMBER CLAWSON: Yes, we do. As soon as they get done, we need to task SC&A to be able to review those.

MR. HINNEFELD: Okay.

CHAIRMAN MELIUS: But my understanding, I thought Stu said one was done.

MR. HINNEFELD: Yes, but it's a TIB for the coworker, uranium coworker model. That TIB is done and it is posted on our website. So they could take a look at that now.

And again, that was just to rewrite the coworker approach into the time-weighted, one person-one statistic approach. And that's only, remember, that's only used up through 1983. That's only used for the in-house staff, not for contractors because they're already in a Class for

that period, the contractors are.

CHAIRMAN MELIUS: Okay. So we can go ahead and task them on that.

MEMBER CLAWSON: All right.

CHAIRMAN MELIUS: Okay. Bill Field, Grand Junction.

MEMBER FIELD: Yes, I just talked to Jim and Tom about this, this morning. We have not meet as a Work Group yet. My understanding is we're waiting for SC&A's review of the Evaluation Report at this point.

CHAIRMAN MELIUS: John?

MR. STIVER: Yes, there's a little bit of a misunderstanding evidently on that. We were waiting, I guess NIOSH was waiting for us, we were waiting for them.

But two of the PER-47 findings, which related to the original SEC review, are still, haven't been resolved. And so we thought that until those SEC issues are resolved, which, you know, are basically SEC --

CHAIRMAN MELIUS: Okay.

MR. STIVER: -- the basis is the same for the period that's already been granted as well as for the proposed residual period, we felt that it wasn't really appropriate to finish up or deliver a review until those findings have been resolved.

CHAIRMAN MELIUS: So, Jim or LaVon, can you shed some light on this?

MR. RUTHERFORD: -- or John, those issues, were they in the SEC period?

MR. STIVER: They're related to the original SEC.

MR. RUTHERFORD: Yes, see those were related to the original SEC, which has already established an SEC period and was extended up to 1985. So we've got an SEC period from the beginning of operations up through '85.

So those issues, in our opinion, are not, have nothing to do with the post-1985 period. So we can go back and look at them and make sure that there's none that overlap into that period, but our methodology and approach that we

established in the Evaluation Report, the second Evaluation Report, is how we feel moving forward for that post-1985 period.

MR. STIVER: This is Stiver. Just one more thing I'd like to say is that, you know, the template is the only Technical Basis Document for this site. So we felt that, you know, if there's problems with that TBD or that template that haven't been addressed, that are related to the SEC review, you know, that was just our position on those, as to whether it was really prudent to move forward on it yet.

CHAIRMAN MELIUS: Maybe, Bill Field, if maybe you want to get together on the phone with NIOSH and SC&A, sort of work out, let's get an agreement. These are sort of technical issues, and we're not going to settle it here. And don't think it's a big deal.

MEMBER FIELD: Thank you.

CHAIRMAN MELIUS: Well, thank you.

MR. KATZ: Bill, I'll set that up.

MEMBER FIELD: Okay, thank you.

CHAIRMAN MELIUS: Hanford, I chair that Work Group. Waiting on some further work from, information from NIOSH on that.

But probably more importantly, since Sam Glover is the lead from DCAS, I've actually talked to Stu and we're going to need to work out a transition first. And before he leaves, I suggest that we do a call on, between, I think Arjun involved, whoever else from SC&A.

And whoever new from NIOSH is going to be involved in that. So a lot of history there and a lot of stuff in progress. But the amount of, now actually I think they're actually waiting for more data from Hanford, if I understand correctly. So we can get that moving forward and do that.

I think there is some, still some -- I think still some issues regarding the SEC period, or potential SEC period, for the construction workers there that still needed, that was being evaluated, do that.

Idaho, we're going to hear about a little bit later. Lawrence Berkeley, I think

we're, is that on today or is that, that's Livermore today. So, Paul, do you have any update on --

MEMBER ZIEMER: On Lawrence Livermore, there's nothing to report since the last time I reported. They are still doing the data capture there.

DR. NETON: I can provide it.

CHAIRMAN MELIUS: Yes.

DR. NETON: This is Jim Neton. I can provide a little bit more of an update on Lawrence Berkeley.

We are still in the process of coding a very large cache of air monitoring data to fill in some gaps with a variety of radionuclides that were potentially exposure sources at Lawrence Berkeley.

And the last project schedule that I reviewed I think has the data coding not being completed until the May time frame.

CHAIRMAN MELIUS: Kansas City Plant, we're going to have an update tomorrow. LANL. Los Alamos, Josie?

MEMBER BEACH: Yes. So, I didn't catch it. I was thinking of something else. Okay, so LANL.

I was going to ask LaVon, LaVon went back the first week of November. SC&A joined him. And so the Work Group will be getting a document from LaVon, and he can just tell us when and what to expect.

MR. RUTHERFORD: Yes, I don't know if I can give you a when for sure, because we will be waiting on LANL to release the documents that we identified.

But we did have a good meeting out at Los Alamos. We retrieved a number of documents to help support the post-1995 period.

We interviewed their internal dosimetrist, their RadCon manager. Went through and, Joe, Joe Fitzgerald and I, and actually got an understanding of their whole program post-1995.

And I think we got a pretty good path forward. As soon as we get those documents back, we'll be able to finalize our report to the Work

Group. And I'll get a better date soon.

MEMBER BEACH: Okay. And then beyond that, once we receive the report and review it, we'll plan a Work Group call. I'm sure we can cover it in a call. And then report to the full Board.

CHAIRMAN MELIUS: Good. Josie, you're still on. Mound?

MEMBER BEACH: Okay, so Mound, when I looked through the work coordinating documents it said our last TBD we were expecting occupational external dose was due last month. But I don't think we've seen that yet.

So all the TBDs have been updated as of 2013. SC&A has not reviewed any of them. And we're waiting for that last one.

But can we task SC&A to start on some of those reviews? I wasn't sure why, what the hold-up was on that.

CHAIRMAN MELIUS: I don't see why not.

MEMBER BEACH: So I think there's five altogether, and the last one. So the first four they can, we can go ahead and task, you're saying?

Is that --

CHAIRMAN MELIUS: Yes.

MEMBER BEACH: Okay. So then you're tasked. And then of course maybe you can let us know where that other one is that's --

MR. RUTHERFORD: I was asking the person --

MEMBER BEACH: In charge?

MR. RUTHERFORD: Well the --

CHAIRMAN MELIUS: Talk about pass the buck here.

MR. RUTHERFORD: Yes, the problem we have right now is --

CHAIRMAN MELIUS: That's what happens with low bid, you know. Is they pass the buck, delay reports.

MR. RUTHERFORD: Yes, he's very low bid. Now, the problem we have is Tim is spread about a million miles. And Tim's working on that issue. And so --

CHAIRMAN MELIUS: The spread or the --

MR. RUTHERFORD: Yes. So as soon as

Tim can carve out some time between his SEC evaluations at Argonne and INL, we'll get that one knocked out. We'll give you a date, Josie --

MEMBER BEACH: Okay.

MR. RUTHERFORD: -- as soon as we can.

MEMBER BEACH: No problem.

CHAIRMAN MELIUS: NTS, Brad?

MEMBER CLAWSON: We've just got some Site Profile issues. I think the last thing, some of the last things that we had, SC&A gave me kind of a punch list on them.

But I think we had a, one of them was a neutron and I think we took care of that when did that at Pantex, Stu. Is that correct, Stu? On Nevada Test Site. There was neutron --

(Laughter)

CHAIRMAN MELIUS: Big site out near Las Vegas, you know.

MR. HINNEFELD: I have a vague recollection of spending about a month driving around there one day.

I am a bit at a loss on NTS. It seems

to me we had some -- there was Site Profile stuff there, right?

MEMBER CLAWSON: It's all Site Profile.

MR. HINNEFELD: It's all Site Profile stuff and I can't remember, sitting here, what it is. And I'll try to get some intel on that and maybe tell the Board tomorrow. Because right now I don't --

CHAIRMAN MELIUS: Okay.

MR. HINNEFELD: -- it's 5:30 at home.

CHAIRMAN MELIUS: I made a note to remind you tomorrow, so. Oak Ridge X-10. Gen?

(Laughter)

DR. TAULBEE: I'll give an update here because I failed to update Dr. Roessler about our progress here.

What we're following up here was exotic radionuclides under an 83.14 with Oak Ridge National Laboratory. We have made some progress this past several months.

Primarily we requested from the

Department of Energy, their bioassay cards for select years, 1960, '65 and '70, to look at them. And we were initially comparing them with the electronic database.

And we found significant problems with their electronic database. To where now we're looking to code these cards and use that from a coworker standpoint.

Interestingly, one of the things that we found was on some of these cards, the initial code that went into the database was like a gross beta analysis. When you look at the card itself, it will actually identify the radionuclide, like sulfur-35.

So it's identifying some of these exotic radionuclides we were looking at. And we had no way of actually categorizing that they were doing monitoring for some of these exotics that we didn't know about.

We have currently requested all the bioassay cards from the Department of Energy, down at Oak Ridge. And Greg is working with them about

providing that to us or getting us an estimate of what that's going to take.

The other avenue that we're currently pursuing is iodine exposures there at ORNL specifically, due to some of the releases that they had there. And this time period is 1956 to 1961 when the whole body count picked up.

And within looking at some of the whole body count records that we've gotten, that we've received from the site as well, you do see some iodine exposures there. So we're looking at this time period where it transitioned from thyroid counts into whole body counts. And whether we can bound the doses in that time period. So that's where we're at with ORNL right now.

CHAIRMAN MELIUS: Thank you, Tim. Jim Lockey is not on the phone, Pacific Proving Grounds. Henry or Bill, anybody have it? I don't think --

MEMBER ANDERSON: No activity.

CHAIRMAN MELIUS: No activity?

MEMBER ANDERSON: No activity.

CHAIRMAN MELIUS: Okay. Pantex?

MEMBER CLAWSON: Pantex. We're still just working on Site Profile issues. They're coming to an end.

And this one we had the neutron/photon ratio. There was some problem with that. And I think that we worked through that. They were going to build one for each one of the sites instead of one size fits all.

DR. NETON: Yes, the Pantex neutron, it's not a neutron/photon ratio at Pantex actually, it's a coworker model using the neutron doses that were out there.

MEMBER ANDERSON: Okay.

DR. NETON: And that's been completed.

MEMBER ANDERSON: Okay.

DR. NETON: That's done.

MEMBER ANDERSON: Has SC&A reviewed that?

MR. STIVER: We're in the process. We've reviewed the OTIB-86 --

(Off microphone comment)

MEMBER ANDERSON: Okay.

CHAIRMAN MELIUS: Pinellas, I think we already heard about.

MEMBER SCHOFIELD: Yes, we did.

CHAIRMAN MELIUS: And we'll hear more in March. But the Work Group will meet before the March meeting.

MEMBER SCHOFIELD: Right.

CHAIRMAN MELIUS: Yes.

MEMBER SCHOFIELD: Once we get the paper from DCAS.

CHAIRMAN MELIUS: And, Phil, while you're up. Portsmouth, Paducah, K-25.

MEMBER SCHOFIELD: We're still looking at the neutron issues for K-25 and Portsmouth. As far as I know those have not been settled. The neutron/photon ratios. Unless I'm unaware of something. Okay, so once we get those settled, I think we can close, pretty much close those out.

CHAIRMAN MELIUS: Rocky Flats we'll hear about tomorrow. Sandia, I think LaVon, Dr. Lemen isn't here, but I think LaVon basically

updated us. Do you want to pursue this in terms of, trying -- mainly thinking if there's any tasking to be done or where we are.

MR. RUTHERFORD: No, I think -- I know that SC&A has been involved with us when we've done data captures and stuff.

CHAIRMAN MELIUS: Yes.

MR. RUTHERFORD: So right now we're still in the process of getting documents to support a final closeout.

CHAIRMAN MELIUS: Okay. Good. Santa Susana?

MEMBER SCHOFIELD: Nothing new there yet on Santa Susana recently. So.

CHAIRMAN MELIUS: LaVon, can you remind us? Jim? Pass the buck.

DR. NETON: Yes, we are still working on the co-worker models at Santa Susana. It's a fairly complex site. There's a couple sites involved.

It's difficult to determine which site the bioassay data was collected from and that sort

of thing. So we're still working that, that issue.

CHAIRMAN MELIUS: And we still have that one-year issue on the --

DR. NETON: That's correct.

CHAIRMAN MELIUS: Okay. Is that tied to the coworker models or is that -- okay.

(Off microphone comment)

CHAIRMAN MELIUS: Okay. Savannah River?

MEMBER CLAWSON: Well, we've just got access back to the data. And I just found out today that they've gone back and they've --

Savannah River has been a difficult one. We've processed through, but we somewhat lost our access to get the data about a year to a year and a half ago.

And so as Tim told us earlier today, they've regained access and they're starting to process our two year old requests. To get it brought up. But it has been out there a long time.

CHAIRMAN MELIUS: Okay. We'll do that. And we still have co-worker model issues

there, which are the ones that concern me.

DR. TAULBEE: With regard to the co-worker, that is what the team has primarily focused on right now. We do have all of the data that we need, or we believe we do, to give you the first two examples, using Jim's new draft implementation guidance.

And the team is currently targeting to where we can present those first two by the March 4 meeting, is our current projections for them.

CHAIRMAN MELIUS: So when, maybe you'll be a little bit more specific on the time. Just think in terms of the Work Group meeting.

DR. TAULBEE: I'll have to get back to you on that.

CHAIRMAN MELIUS: Okay.

DR. TAULBEE: I can't remember whether it is late February, early March time frame that that's projected to be completed. Those first two models. To give you the examples.

My question is, which Work Group would it go to? The Coworker Work Group or SRS or both?

CHAIRMAN MELIUS: Well, that's what I'm asking. I think, certainly the co-worker, since they're examples. Whether we do -- Jim?

DR. NETON: We can do a joint meeting.

CHAIRMAN MELIUS: I was thinking a joint meeting. That might be a way of more efficiently using people's time and so forth.

DR. TAULBEE: Okay, I'll try to get you a date as to when we are currently projecting for that to be completely finished.

CHAIRMAN MELIUS: Okay. And then we can set up --

DR. TAULBEE: First --

CHAIRMAN MELIUS: Yes. I just think -- I keep hearing lots of talk about work group models. And we sort of left off finalizing, you know, coworker models. That we sort of have left off as sort of trial and our criteria on coworker models pending looking at some examples.

And I just get worried that we, meanwhile work needs to go on and so forth. So these are critical and, you know, thank you for

being the guinea pig. But --

DR. TAULBEE: Yes. No, these are very in the front of our minds. And that is what --

CHAIRMAN MELIUS: Yes.

DR. TAULBEE: -- our main focus with Savannah River right now is. Is those two --

CHAIRMAN MELIUS: Yes.

DR. TAULBEE: -- coworker models, in order to give you the examples so that you can provide feedback as to whether these would be adequate.

CHAIRMAN MELIUS: Yes. Good. Okay. Anything else you want to add, Brad, or --

MEMBER CLAWSON: Well, I just want to make sure that we get time to be able to look at these and also so SC&A can look at them. But this really has been out there a long time. We really need to get aboard on this.

CHAIRMAN MELIUS: I agree. Science issues. Dave's not here, so --

(Off microphone comment)

CHAIRMAN MELIUS: Okay. Special

Exposure Cohort issues, we've talked about. Subcommittee, subcommittee.

I think TBD-6000 has done enough work, but I don't know if you have any more to report, Paul?

MEMBER ZIEMER: Yes, I do, in fact. The other item on our plate for TBD-6000 is Joslyn. And that's Appendix J, is the Site Profile.

And there were a couple White Papers that NIOSH had issued to deal with some findings on Appendix J. SC&A has reviewed those. I think NIOSH is still working on one of the responses.

My recollection, and I believe Dave Allen is handling this, but my recollection is that NIOSH expected to have their response by something around mid-December. So once that occurs we'll set up a Work Group meeting to deal with the Appendix JJ issue. Or Appendix J, I mean. It's J. That's it.

CHAIRMAN MELIUS: Okay, thank you for a lot already. Henry?

MEMBER ANDERSON: We have not met.

But I think we've had Westinghouse Electric -- has been sent to us.

CHAIRMAN MELIUS: Yes.

MEMBER ANDERSON: So I'm not sure where, I think that's been sent to SC&A. Wasn't it?

CHAIRMAN MELIUS: Correct. SC&A. And we are requesting us. I haven't --

MR. STIVER: Yes, we have completed our review and delivered it.

CHAIRMAN MELIUS: Okay.

MEMBER ANDERSON: Was that --

MR. KATZ: So we're waiting on NIOSH to --

MEMBER ANDERSON: Yes, right. That came in, was that the July one? July? Or I think it was --

MR. STIVER: I think it was September. I think. I can't exactly --

MEMBER ANDERSON: I don't, yes, I -- sort all my paperwork here. Yes.

MR. STIVER: Just after.

MEMBER ANDERSON: Yes. So we're waiting for NIOSH to respond and then I think we'll get together. Hopefully we'll get that by March.

CHAIRMAN MELIUS: Surrogate data, no activity. Weldon Springs, Dr. Lemen isn't here. I'm not sure if there's any activity there.

Worker Outreach, can you --

MEMBER BEACH: No, no activity. Nothing new.

CHAIRMAN MELIUS: I would just point, related to Worker Outreach, and I didn't mention it in presentation, but one of the issues that's sort of has always been outstanding in terms of our dose reconstruction reviews is dealing with the interview process as part of that. And we've dealt with it separately when NIOSH did the revisions on the interview.

But it seems to me it's going to come up again in terms of the kind of information and quality information we collect as it's relevant to certain parts of the dose reconstruction process.

Are we collecting the right information

that is, you know, parallels and satisfies the needs, types of information that's needed for the dose reconstruction process. And I think that may be something that we'll want to think about as we go forward on that.

MEMBER BEACH: It's not a bad idea.

CHAIRMAN MELIUS: Yes.

MEMBER BEACH: Can I ask about new Work Groups? Livermore comes to mind.

CHAIRMAN MELIUS: We'll have an update. And we don't have a report, right?

MEMBER ANDERSON: We'll send the report in --

CHAIRMAN MELIUS: In March. So I think it will be at the time we appoint the --

MEMBER BEACH: Yes, get the, okay.

CHAIRMAN MELIUS: Appoint that. I'm not sure there's any other -- I'm trying to think, are there any Site Profile -- I just have a feeling we're sort of at a rate-limiting step in terms of available resources and so forth.

I'd hate to start, I mean obviously on

Livermore we'll do something with the -- we'll see what the SEC report is. But other than that, I think we're sort of at capacity, if not beyond capacity, in terms of the amount of work that needs to be done.

But we should, I think maybe for our next meeting, next Board meeting is just to at least systematically go through and see are there other Site Profile Reviews that we've, or the document reviews we need to be taking up.

MEMBER ANDERSON: Any of them that are pressing I guess is the --

CHAIRMAN MELIUS: Well, I think --

MEMBER ANDERSON: I think lots of them --

CHAIRMAN MELIUS: I think we've taken the ones that are pressing.

MEMBER ANDERSON: Yes.

CHAIRMAN MELIUS: But it doesn't hurt to look again and see if it's something that --

MEMBER ANDERSON: Have some in the wings, I think.

CHAIRMAN MELIUS: Yes. Yes.

MEMBER ANDERSON: Resources --

CHAIRMAN MELIUS: Yes. So we're a little bit early on our break, but that will be fine. And we'll reconvene promptly at 3:30 this afternoon.

We have Idaho. We may have petitioners on the line for that thing, so if we can be prompt. But we should do it as scheduled at 3:30.

In terms of Board work session, I think all we, a little bit of correspondence, but most of that's by referral, I think. It's not really, but we'll talk about that. We have a little bit of time tomorrow. But we might be able to get done a little bit early.

MEMBER KOTELCHUCK: Question?

CHAIRMAN MELIUS: Yes.

MEMBER KOTELCHUCK: I had written down was the Idaho National laboratory at 3:45. Which is a little long for our break. But I was just concerned that there maybe people on the line that --

CHAIRMAN MELIUS: It says 3:30.

MEMBER KOTELCHUCK: Okay, I must have the slightly older --

CHAIRMAN MELIUS: Yes, it's scheduled at 3:30.

MEMBER KOTELCHUCK: Fine. I may -- good. As long as it's scheduled.

CHAIRMAN MELIUS: Well, mine has the official Ted Katz seal of approval.

MEMBER KOTELCHUCK: Yes, that's good.

CHAIRMAN MELIUS: But it probably has changed. A bunch of the stuff did change.

MEMBER KOTELCHUCK: Yes, there's a cushion with change.

CHAIRMAN MELIUS: Yes, yes. And I had to go through and -- I had like three versions of it when I was getting ready to come out here. And --

MEMBER KOTELCHUCK: And so I just wanted to make sure that --

CHAIRMAN MELIUS: No, no, thank you, Dave.

MEMBER KOTELCHUCK: -- the general public was promptly --

CHAIRMAN MELIUS: You had me fearful that I had spent the whole day going through the wrong schedule.

MEMBER KOTELCHUCK: No.

(Whereupon, the above-entitled matter went off the record at 2:44 p.m. and resumed at 3:32 p.m.)

MR. KATZ: So we are about to get started. Let me check on the line and just see that we have our Board Members who have been with us on the line at least.

(Roll call)

CHAIRMAN MELIUS: Okay. We will now have a presentation, talk about the Idaho National Laboratory and we have an SEC petition and a number of other reviews going on right now.

So I think we'll start with Tim Taulbee to present and then I think John Stiver has a presentation following that. And I'll just add the Work Group did meet last week. Okay.

DR. TAULBEE: Thank you, Dr. Melius, Members of the Board. I am going to give an update on where we are with the Idaho National Laboratory SEC update.

We have been following along with the previous proposed Class Definition, and so I'll give you an update of what we have found since then.

So I'll go over that Class Definition again and then give you the NIOSH update with where we are with regards to data gaps, dosimetry, a monthly report comparison, and then the review of NOCTS claims, and then I'll give an update of where we are overall with INL/ANL-West, kind of an activity timeline.

And then, as Dr. Melius mentioned, I believe after I get done speaking, then SC&A will talk about where there are with their update.

So to remind everyone, the proposed SEC Class Definition that we proposed back in July, well, we originally proposed a Class Definition in March and then we revised it in July at the Board meeting, and so this Class Definition has not

changed since your July meeting.

And it is all employees of the Department of Energy, its predecessor agencies and their contractors and subcontractors who worked at the Idaho National Laboratory in Scoville, Idaho, and a) who were monitored for external radiation at the Idaho Chemical Processing Plant, CPP, for example, at least one film badge or TLD dosimeter from CPP between January 1, 1963, and February 28, 1970, or who were monitored for external radiation at INL, again, at least one film badge or TLD dosimeter between March 1, 1970, and December 31, 1974, for a number of work days aggregating at least 250 work days occurring either solely under this employment or in combination with the work days within the parameters established for one or more other Classes of employees in the Special Exposure Cohort.

So one of the questions that was posed to NIOSH during the March Board meeting was does NIOSH have all of the dosimetry data. And so remember this was an issue with the Mound SEC that

was proposed where the dosimetry, or the tritium bioassay was used to identify the Class and then after the fact we found that there was about a year of bioassay logbooks that were missing.

So over the past several months NIOSH has looked at this, we've looked for data gaps within the dosimetry and then we also compared the number of dosimeters reported in the monthly health physics reports versus the number of people listed on the badge reports that we obtained from the site.

So a review of the dosimetry gaps, back in July, I reported that there were three months that we're currently missing that we were following up on.

Since then there is only one month and this is December of 1970 that is missing. It is interesting to note that the cycle end date for this particular dosimetry report was December 25, 1970, and so this would be the date that they were to produce this printout of the dosimetry report, and so it looks like nobody hit print on that particular day, on Christmas Day.

We don't view this as significant since the annual reports are available for 1970. What we did was, and during this time period from March of 1970 through December 31, 1974, a single badge anywhere on site is what we are defining as part of the Class, so this falls within that all-monitored time period.

And so if an annual summary exists, that would indicate that there could be, that there was a dose during that period and this would enter them into the Class.

We did check these to make sure that the doses from that December did make it into the electronic database, which is an IBM system, and so we took several workers and we looked at the sum of their dose from January through November and then we looked at their annual total.

We selected workers that purposely had kind of monthly constant type of an exposure and what we found is that annual dose did make it into the database and just that printout was produced, or at least the site can't retrieve that single

printout.

But the doses are there, so an annual dose during that year would indicate that they were monitored during that year, so they would be part of the Class.

So we do feel that this is encompassing, so this one-month data gap is really not significant and nobody should be excluded as a result of it.

The temporary badge reports, which I pointed out before, none appear to be missing. NIOSH has temporary badge reports for every month between 1959 and 1976.

What I couldn't report to you the last time was the CX dosimetry reports. If you recall we had not received those from DOE yet.

The following month, in August, we did receive them and we had to go back and do some follow-up with the site as well because there was about a 3-month period that was missing from the initial set that was sent to us.

They went back to the box of records and

there was about 25 pages that hadn't been scanned. They re-scanned them and sent them to us.

So at this time there is no gaps or missing data in the CX dosimetry reports, and remember CX is the construction side.

So it's interesting from what we are missing here is the month of December for the operations folks at INL, but not the construction, the construction we have the complete complement.

So our next comparison was the monthly health physics reports versus what's on the CPP dosimetry and the goal here is that, if the site indicated they processed 500 dosimeter badges in a month, do we have 500 dosimeter results in these printouts, and if we do, then we can be fairly certain that we actually do have all of the data that was taken for that site.

So we reviewed 1963 through 1970 and we found very good agreement between the monthly reports and the dosimetry printouts, and this is an illustration of that and I have added the CX dosimetry here to the bottom of this particular

graph.

And what you will see is that the CX dosimetry designator was used early on in the 1950s and actually into the late '50s and then it wasn't used for a time period and it picked up again in April of 1964.

Now you'll see a drop there off of the prime CPP dosimetry reports and we looked to see if those construction workers were part of the operations report and it turns out they were.

If you go to that operations report, you will see these workers who worked for HK Ferguson listed on the main production CPP dosimetry reports until April of 1964, then they start showing up under their own designation as construction, again, during this time period.

The other large drop that you'll see in 1967, this is the result of TLD monitoring where, instead of monthly film badges issued to people they were given a TLD to wear for three months, so you do see a big decrease in the number of dosimeters, if you will, because people were

wearing them for a longer period of time during that time period.

Here is a close-up or a zoomed-in version of the CPP construction dosimetry, this would be the CX dosimetry, and, again, this data wasn't available in July whenever I was presenting the previous things to you.

But, as you can see, with the CX dosimetry from the monthly printouts and the dosimetry reports we're seeing very good agreement on a month-by-month basis.

Here is the comparison of the TLD dosimetry and, again, you see a good comparison with the notable exception of that December of 1970 where we don't have a report in order to do that comparison.

So here is some comparison statistics for you, and I'll just jump here down to the total. For January 1963 through November of 1970, the health physics monthly reports that were issued each month indicated that they had processed 46,287 dosimeters.

By going through the dosimetry printouts and counting up the number of names and dosimeter readings that we have we have 46,723, or a surplus of about 436.

And so some of this is -- when you do a month-by-month comparison you will see that one month might be a little low and another month high, generally adjacent to each other, where you are seeing differences in report cutoff times with months from that comparison.

But overall over this 7-year time period, we are seeing a slight increase of number of names on those dosimetry reports. Some of those are actually handwritten on those dosimetry reports so they probably didn't make it into the monthly report.

So the final thing that we were reviewing is all of the INL claims within NOCTS that we have received to date.

Our first cut of this review was to determine whether the employment period was within the proposed SEC and what we found was 872 claims

did not work during the proposed SEC time period, 881 claims do have employment during the SEC.

So the second component of this review is to take those 881 INL claims and determine if there is indication of CPP work and do we see this dosimeter result in there.

And so we looked at the Computer-Assisted Telephone Interview, the dose reconstruction report, and the DOE file in order to make a determination of where this person worked and can we place them in the Class there at CPP.

In July I reported that there were 32 claims that needed following up of that 881. After we received the CX dosimetry files that dropped down to ten claims that needed following up.

By October, we re-evaluated this particular ten claims to make a request to the Department of Energy site, we found that three of them actually are already part of the Class due to their dosimetry in the 1970s monitored anywhere. So we are actually down to seven that NIOSH is following up on.

We submitted a request for these seven claims and we sent this to the site on October 5th and we are waiting to receive back this information.

SC&A in their review of our methodology, identified 11 additional claims and these were also sent to the site on October 13th for follow-up.

So right now in total there is 18 claims of the 881 that are being followed up, or about 2 percent. We do expect to receive the supplemental dosimetry on these 18 claims by the end of this month.

We expect to provide a summary of the claims to the Work Group by the end of the year, and there is planning for an INL Work Group conference call for the second week of January in order to discuss these results.

So in summary there is no significant data gaps that we have identified. There is good comparison between the periodic reports and the dosimetry data.

The follow-up between NIOSH and SC&A has been reduced to 18 of 881 claims, or 2 percent. Thus, the current Definition works for at least 98 percent of the claims that we have in NOCTS.

So now let me give an update on where we are with the ANL-West petition. Actually, before I go on to there is there any questions on this first part?

MEMBER MUNN: Well done.

DR. TAULBEE: No?

CHAIRMAN MELIUS: Go ahead. Let's wait, maybe after John we'll open it up in general. I think it's a little easier, yes.

DR. TAULBEE: Okay, that sounds good. Okay. I had hoped to present to you the ANL-West SEC petition at this Board meeting. I mentioned that back in July.

We ran into some difficulties that now it's going to be delayed to late January or early February to be sent to the Board and we do plan to present this in March at the next Board meeting.

What we found kind of at last minute was

the discovery of some bioassay data, urine and fecal results for ANL workers that was located at ANL-East.

In the past, ANL-East has indicated that they did not have any ANL-West data, bioassay or dosimetry. INL had indicated that they felt they had all of the ANL-West data at their site.

And so what we did was we conducted a test of the dosimetry and so we sent eight claims to both INL and ANL-East and asked for what do you have on these workers.

And we did a mix of people who started out working at ANL-East and then went to work at INL, so we knew they should have data in both places, some of it from ANL-East work and some from INL, and some that only worked at INL.

And what we found is, of the initial test of eight people, all eight had bioassay records at ANL-East, and so this caused a pause in our current thinking for the ANL-West petition and so we've been doing follow-up on that.

That follow-up is what has really

delayed the previous supplemental dosimetry request, because this was going to be a large request to both sites, INL and ANL-East, and so we requested records from 42 additional workers.

And we didn't receive all of those until the last week of October and at that time the site started following up on that supplemental dosimetry that we requested back in October.

So our current projections for the ANL-West SEC petition is to present it to you all by the March Board meeting and, again, we hope to get that out the end of January, beginning of February.

While we were waiting on this follow-up at the site, because there are two groups that are working on records at INL, one is the EEOICPA group that actually pulls dosimetry records, and then the other group pulls survey records and air sample data and the information for follow-up on the reserve sections of the SEC.

And so while the one group was working on all of these claims we went back out to the site

the first, or the week of October 19th, and then the second data capture the week of November 2nd, in order to review records out there and make a request from the other group so that we weren't going to be losing any time here for the evaluation of those reserve sections.

And so that was conducted and we have made our request and they are currently being reviewed by the site.

We did identify through these data captures that we need to conduct a couple of additional interviews and we've been coordinating with SC&A and the Board to conduct some interviews in January and we hope to be able to incorporate those into our reserve sections evaluation here.

Our goal is currently, again, for February and beginning of March, and that I don't have an exact date as to whether we're going to actually meet this one or not for these reserve sections, but we don't see where we've actually got any loss of time due to the shift that we did a couple of weeks ago while we were waiting on those

supplemental requests.

So we are still projecting to present both ANL-West and the reserve sections of INL during that Board meeting. I can't promise it. ANL-West I can promise, this one I can't.

Once we do complete both of these, ANL-West and the reserve sections, we'll be working with the Advisory Board and SC&A to resolve findings and issues, concerns with all three of these reports that we are currently working on.

We did meet a couple weeks ago, or last week for INL, and SC&A raised several issues and we will be following up on those but not until we get these things closed out.

The same staff that are working to close these out are also the ones that will be responding to SC&A's comments and concerns. So with that, I'll be happy to answer any questions. Thank you.

CHAIRMAN MELIUS: Any questions now?

(No response)

CHAIRMAN MELIUS: And we'll have time for other questions after John Stiver has

presented, because I -- particularly on the petition part, the earlier part of Tim's presentation, some of this will, I won't say become clearer, but there is additional information that's relevant.

I'll just add, I'm not sure if the petitioners are on the line for the Idaho, but if they are, they will be given an opportunity to make comments a little bit later after some of these presentations and the Board have had a chance to ask questions.

You're not required to make comments, but I just wanted to make sure you understood that if you are on the line, you weren't being forgotten.

MR. STIVER: Good afternoon, Dr. Melius and Members of the Board. My name is John Stiver, I am with SC&A, and today I'd like to provide you all with an update on where SC&A stands on several different issues.

If you recall back in April we were tasked to review the dosimetry-based CPP Class Definition, which Tim has just explained, and the

follow-on to that, the Revision 1, which opens up the dosimetry requirement from March 1970 up through December 31, 1974.

In addition to that we were tasked to begin looking at some of the areas, times, and activities for which NIOSH believes that they can reconstruct doses.

In total we had about six different reports, which I have tried to condense into something that's manageable in about a half hour's time frame.

I think it was Mark Twain that once said that if I had more time I could've written a shorter story, and that's kind of where we are right now. But, with that, let's go ahead and get started.

This, again, is just kind of a repeat of the timeline of the Work Group discussions for SEC-219 and the Advisory Board meeting and as you know we had a meeting last Tuesday on INL where six of our presentations were discussed in quite a bit more detail than we'll do today.

This is going to be the 10,000-foot

view, or maybe the 30,000-foot view. But, anyway, let's start out by looking at the evaluation, the Class Definition.

And our goal was really to evaluate if a revised Class Definition may unintentionally exclude certain workers from the Class due to the dosimetry requirements who might otherwise be included.

We looked at all currently available claimants with at least 250 days of covered employment and we really took an approach of looking at the two different periods, the later period and then back to the earlier period.

And we investigated the claimants who did not meet the SEC dosimetry requirement to determine the potential for internal exposure to alpha-emitting contaminants at CPP.

At the time of the review we identified almost 900, 898 claimants with covered employment who worked in one or both periods, and I just kind give you a breakdown of the different categories.

This is all laid out in detail in Bob

Barton's report and I'd like to just take some time right now to thank the people who really did the heaving lifting, which is Bob Barton, Ron Buchanan, Amy Meldrum, John Mauro, the whole crew, Steve Ostrow, so we had quite a group of people working on this that really put in a lot of good quality work.

This just shows you the total claims evaluated in the later period. About 85 percent were monitored, about 15 percent weren't, and about 77 percent met the SEC requirement.

I have really three observations related to this later period, first being that we felt that at least in our approach we were looking for any evidence of monitoring during the later SEC period, not just an external dosimeter, but say a location file card, internal dosimetry, things of that nature.

The second observation follows for that we did find one claim that contained an in vivo dosimetry related to CPP but did not have external dosimetry and we recommended that should be

included in NIOSH's follow-up.

And then we also, this was an observation that was clarified at last week's meeting, is how temporary or visitor badges were going to be used, and Tim indicated that they'd be, those types of badges as well as location file cards would be adequate for inclusion in the SEC as long as the 250-day requirement was met.

That said, we do believe that observations one and two do raise concerns about a Class implementation at a practical level.

And now we're taking a look at the earlier period. We looked at a total of 219 claims. Again, 67 of those, or about 30 percent, met the SEC requirement.

Twenty-six percent were, or -- excuse me, 11, almost 12 percent were not monitored and this 11 percent and the other category includes the 11 that we, that Tim mentioned earlier that we identified for further follow-up as well as some others.

I think there was five that had a

categorization called CADRE and we weren't quite sure what that meant. There was some evidence that it might be related to CPP, but other evidence that it could have just been a subcontractor and so forth, and that's something that NIOSH, I believe, is looking into.

This is the observation for regarding CADRE, which I just mentioned. Further evaluation, NIOSH, as you know, there is seven that they are following up on. We are following up on 11 of 23, and that's really kind of the long pole in the tent.

Like I said this is, or that Tim had mentioned earlier, we are reviewing these claims in hopes of having a resolution and be able to understand what happened or what is the situation with these 18 claims in time for a January discussion before the Board teleconference.

The next thing I would like to go over is our dose reconstructability or gap analysis. Like I said, I think this is something you have seen, at least at the July INL Work Group meeting.

We looked at two components of the horizontal analysis and then kind of looked at certain areas within the site that we felt might be productive in terms of this initial review for reconstructability.

Reactor modeling and the fission and activation product indicator bioassay, radionuclides were kind of horizontal, meaning they span the entire site.

You'll see that this idea of using strontium-90 or cesium-137 bioassay in conjunction with OTIB-54 or TBD-5 to look at ratios and to use those indicator radionuclides to determine the intakes of other fission and activation products as well as actinides.

It kind of spans -- it was a common thread throughout the entire process of reconstructability. It applies to Test Area North, Central Facilities, burial grounds is a little bit different, the Chemical Processing Plant pre-'63.

Both of those last two are actually

pended and we'll be reviewing those again after our January data capture trip.

Looking at the test reactor area, we tried and looked at some of the big production reactors. We didn't look at some of the smaller low-power reactors.

In fact, that was a tasking that came out of the Work Group meeting last week was to compile a prioritized list of reactors that we have not looked at at this point.

And, once again, you know, the issue here is does OTIB-54 ratio method provide sufficiently accurate and claimant-favorable dose assignments or intake assignments for workers based on who have basically gross gamma and beta bioassay.

And, also, you know, to have often operating scenarios have been identified and those are also addressed in the reports, including TAN.

This kind of lays it out. Air sample and urinalysis data to mix fission products and activation products are available only in the form

of gross beta or gross gamma activity attributed to specific net radionuclides.

And OTIB provides the guidance on assigning these using ratios of cesium and strontium-90 and the goal in the OTIB is really to reduce a large amount of reactor fuel data and to simply a representative set that dose reconstructors can use, and they're actually looking at actual claimant cases.

Table 5.1 of the ER lists eight TRA reactors. Only the first three are high-power, high-flux reactors. These are the ones that we looked at, the Advanced Test Reactor, Materials Test Reactor, and Engineering Test Reactor.

As far as the ATR goes OTIB-54 modeled the ATR using ORIGEN scale and as expected we didn't find any material instances based on the modeling exercise of the ATR operating outside of its design envelope, so we had no problems with that.

As far as the Materials Test Reactor, we feel that as long as it was operating with the uranium core it would be adequately represented by

the modeling exercise.

With that said, in 1958 and then again in the 1970's the MTR was one where the plutonium-239 cooler -- And so the question remains is how much different were the plutonium operations and would those differences be radiological significant from a dose reconstruction standpoint.

ETR, again, as with MTR operations, the OTIB-54 methodology should also adequately envelop the ETR considering internal exposures.

As far as the path forward here we need to resolve the issues of the applicability of OTIB-54 to the MTR operating with plutonium fuel, and as I said earlier we are to prepare a prioritized list of other reactors that may fall outside the envelop of OTIB-54.

The next thing we looked at was Test Area North. There was all kinds of activities, very -- excuse me, I jumped ahead -- Of a very unique nature, this was taken right out of the TBD.

It just goes to show you that there are lots of different activities, experiments,

one-of-a-kind experiments going on in Test Area North.

So it called into question whether you can use sort of a one size fits all ratio method to adequately address what was going on at TAN.

We went to three different areas. One thing we looked at was the completeness of the external dosimetry data that's been captured to date.

We looked at the applicability of OTIB-54 and TBD-5 for the performance of internal DR, as we had done at several of the other sites, and then we also took a look at the unique circumstances of the airborne nuclear propulsion system, which really are not addressed in OTIB-54.

As far as the external dosimetry goes, although the data represented is just a sampling from the site, as NIOSH indicated at the meeting last week, they nonetheless believe they can reconstruct doses based on this incomplete dataset, so we felt that it was still worthwhile to take a closer look at it.

We looked at the SRDB, these are all records that have been captured by NIOSH. We found a lot of information, 12,000 plus pages, 180,000 plus beta gamma readouts, and almost 7000 neutron readouts, or badge exchanges.

We feel that the external dosimetry for TAN appears to be pretty complete from '55 through '70. There is a small gap, but then again we don't know whether that data still exists out there.

Likewise, for the neutron dosimetry data there may be more out there that would fill these gaps.

Based on the review to date though we feel that it's not really possible, there's not enough granularity to look at each of these sub-areas of TAN and create coworker models if it's deemed necessary to do that.

At present I don't believe NIOSH is planning to create coworker models, external coworker models for TAN, but if the Board were to determine a full completeness study would be warranted additional data capture would be needed.

Now we looked at OTIB-54 to reconstruct external doses. This goes to show there are a lot of different types of source terms there. Again, this is all laid out in the TBD.

What did we do here? What we did was we used the approach of using ORIGEN simulations to look at a couple of things, what are the inventories of reference fission products in OTIB-54 reasonable, and, likewise, with Tables 5.22 and 5.23.

There's a little caveat here that the ORIGEN simulations and the tables in TBD-5 are not considered appropriate for workers handling ANP fuels because of the unique characteristics, which is also laid out in our report, and I'll get into that in a minute.

What did we conclude based on this analysis? Well, the ORIGEN modeling in conventional reactor fuel was generally claimant favorable when the fuel is highly enriched, maintains its integrity following burn up, and is at a high power level, roughly 200 megawatts.

However, a caveat to that is our work underscores the importance of limiting our observations to general trends.

For example here dose estimates were based on a 200-day burn model typically overestimate doses for actinides. However, the modeling exercise here doesn't comport well in some cases with our analysis of actual measurements, which we'll get into in a minute where we looked at the, you know, here we are looking at the modeling exercise, you know, basically the same thing what was done to create these tables in OTIB-54.

It's all based on computer models that haven't really been benchmarked against actual data, so we did our best to, you know, to come through SRDB to find actual data as kind of a beginning benchmarking analysis if you will.

ANP, this is a little bit different animal here. These heat transfer reactor experiments were conducted to test the viability of a reactor for aircraft propulsion, and there

were three different reactors built.

Direct cycle air cooled, you had a turbo jet engine, and it compressed and focused -- air passed these wafer thin concentric ribbons of nuclear fuel that were enriched to 93.4 percent and the temperatures of the fuel were up to 3000 degrees Fahrenheit, heated up to 1250 degrees, and so you've got a lot of fission products just being blown out the back of this engine, and so that's kind of a unique situation as you might imagine.

There were several of the initial engine tests, you can see five of them didn't use nuclear power and so there is no potential for releases.

IET 1, 3, and 10, however, did have potential for onsite and offsite contamination, however the Test 1 and 3 have already been discussed in the INL Work Group to determine if the plumes went offsite.

We don't believe there was any onsite deposition. However, IET 10 is still open. NIOSH will be preparing a White Paper on that as a result

of this November 10th meeting.

Recommendations, observations, SC&A back in 2003 did a -- and contracted CDC, did an independent analysis of the airborne emissions and revealed that the DOE had significantly underestimated the emissions for the IET's largest airborne emissions.

So we feel that the outdoor exposures associated with the ANP, particularly the IET-10, need to consider the results of the CDC investigation, and so there will be challenges associated with reconstructing outdoor onsite exposures associated with these releases.

The next thing we did was once again we looked at OTIB-54's applicability to Central Facilities. This is a site that handled a lot of different types of materials from all over the site so there is a potential for exposures to the whole gamut of mixtures and radionuclides that could have existed.

This is kind of a background slide here. At the July 8 meeting we kind of prepared an initial

review trying to determine what we needed to look at, do it a little bit more vertical.

However, we recommended that the survey data that was available both during operations and prior to D&D should be evaluated to take a look at the actinides, ratios, and compare those to the tables and also to OTIB-54.

As you can see these are the things of concern, missed intakes of uranium, potentially thorium, plutonium, are of particular interest to us.

Once again, you know, you see the same type of approach being taken, kind of the one-size-fits-all approach. So what did we look at?

We looked at the survey data, we looked throughout the SRDB, we found for a couple of years in the mid-1950's contamination surveys, the hot laundry and chemical engineering lab, also some post-D&D soil samples from the excavation of a contaminated sanitary sewer line on the north side of Building CFA-669.

As far as the survey data go, once again only beta, gamma, and alpha results greater than background levels were considered. There were 85 survey results that met the criteria.

Six smears were not included in the analysis because they weren't consistent with other results and may have been transposed.

Maybe the biggest obstacle we ran across is we didn't have actual measurements in activity.

We had results in cpm and we found some limited counter-efficiency information that we used to kind of estimate what the activities might have been, but that's certainly an area that will need to be reviewed for a more complete, robust dataset.

As far as the soil samples we had 19 samples from the sanitary sewer line. We looked, they were obviously analyzed for the alpha and gamma spectrum and strontium-90.

U-234 were not significantly different from an environmental level, so at least in this

situation it doesn't look like that was a problem.

As far as the summary the smear data and the soil samples show general agreement, the magnitude, the contamination ratio, the maximum ratios in Tables 5.22 and 5.23.

There are lots of limitations of the data here. It's very limited from the period of early operations. We don't have actual activities.

We would like to see characterization service prior to D&D and we're hoping to actually look a little bit more carefully at this and see if we can find some more data in the January data capture trip.

Now we'll move on to looking at the actual measurements. This is the indicator radionuclide study. There are actually four different aspects of it, or really four primary cornerstone assumptions that would form the basis of NIOSH to reconstruct internal doses.

First, regarding the actual FAP bioassays. If you have sufficient worker records

you can actually reconstruct strontium and cesium-137 intakes.

Even if you don't have results for the particular worker at a particular time there is enough data there that you could build a coworker model.

Second, except for special situations, all the significant FAP intakes are directly tied to an indicator radionuclide, either strontium-90 or cesium-137.

Item C as far as actinide intakes, the same type of thing. You can use a ratio method using Tables 5.22 and 5.23 of TBD-5.

And then finally for special situations, you've got personnel involved in operations with actinides that were not directly tied to a fission or activation product in a ratio.

NIOSH is assuming that these people were adequately monitored and that the results will be available in the workers records and as a result of that doses will be reconstructable.

We looked at -- actually did two

different reports. Item A we looked at separately from Items B through D and what we did here is we just did a random sample, actually we call it a semi-random sample because it was kind of biased towards employment periods which kind of weighted more towards the construction trades, people that had, you know, multiple periods of employment.

What we were looking at were all the workers monitored, are the records complete, and are coworker models appropriate, other than those that are already designated, which NIOSH, as you saw Tim's nice presentation with the change in 1967 where it went to -- going from monthly or quarterly or semi-annual monitoring which would then call in to question the need for a coworker model.

Let's see. There were 973 claimants who are covered in employment during the evaluated SEC period. This is not just the proposed SEC period, but in the actual petition.

So we got about 10 percent that we randomly selected. More than 60 percent were trades workers, as I mentioned earlier. Mainly,

the summary concluding recommendation, this is based on our review of the claimants, we felt that fission and activation product is generally available for a wide variety of job titles.

We don't believe there are completeness issues with the datasets that would preclude its use in developing coworker models. So we believe coworker models can be developed for all periods in question.

We didn't see any indication either that specific job titles were systematically excluded. However, we do believe that these coworker models should be evaluated and developed for each relevant site area beginning with the start of rad operations for each individual location and that we feel there are periods where a lot of workers were not monitored even prior to 1967.

I believe about only 30 percent that we looked at had complete monitoring records overall.

So where do we go from here? We discussed this in the November meeting and NIOSH

agreed with us that these models may be appropriate and they are going to assess the requirements and feasibility for applicable site areas in years prior to 1967.

Now looking at Items B through D, we tried to evaluate the ratios using actual measurements. Again, the same approach being discussed here.

We are concerned that the ratio values are derived mostly by computer simulation without any kind of benchmarking against actual data by virtue of the fact that a lot of that data was not retained.

We looked at three different sources, NOCTS, SRDB, and the electronic database, the INL database, and we did find about 42 samples, nasal swabs, some urinalysis, fuel element scales from I believe Brookhaven, fuel storage contamination swipes, and air samples.

Four main results here, we determined that the FAP intakes assigned using OTIB-54 based on strontium-90 are generally equal to or greater

than those derived from actual measurements, so NIOSH is okay on that in most cases we're all right as long as long as we're using strontium-90.

Probably the biggest thing that jumped out at us from this review is that the cesium to strontium ratios are not always 1:1 as assumed in OTIB-54 and TBD-5.

We thought, you know, if you've got a -- you know, if the measurements are within a factor of two are probably good, sometimes we're seeing variations of factor of ten, you know, or more.

So that brings into question the validity of using an indicator radionuclide when deriving these intakes because that cesium to strontium ratio of 1:1 is one of the fundamental cornerstones for the ratio method at INL.

As far as actinide intakes based on strontium-90 intake values, they are sometimes significant -- and cesium, are sometimes significantly less than those derived from actual measurements.

And as far as special bioassays it's

really kind of difficult to evaluate when the special bioassays were needed if they were performed, or if they are indicated as such in the bioassay records.

As far as what to do from here, to determine from the records of analysis the dissolver, that this would be really be great if we could find that of the fuel elements, preferably for a variety of reactors, and also fuel elements from offsite reactors that found their way to Idaho.

If we can find that that would really go a long way to helping to verify this approach. Obviously, we've got to conduct further document search, research, to evaluate the recommended ratios.

Hopefully records can be found that have quantitative radionuclide analysis in addition to what's already in the SRDB.

We need to determine if these special or non-routine bioassays were associated with special exposure events, as assumed in the ER or

if the term special or non-routine might just be applied to the priority of processing, so we really need to determine whether they were taking bioassays at a time when they weren't even, didn't even have internal dosimetry models to calculate the organ doses or the CEDEs.

Our data capture trip in January, we are really hopeful that we'll bear fruit in this regard and after that the report will be revised based on our findings.

Now these are the two sections that are being pended, burial grounds in CPP pre-1963. I believe we've got enough time to go through this really quickly.

CHAIRMAN MELIUS: Yes, three minutes.

MR. STIVER: Three minutes, okay.

CHAIRMAN MELIUS: Yes.

MR. STIVER: I'll see what we can do. This kind of outlines our concerns whether it was a strict contamination control program, if there might have been some conflict of interest with the burial ground people also being health physicists

who were supposed to be in charge of health and safety.

Robustness of the program, this so-called defense in depth approach, whether that was actually applied. As you can see there is quite a few things that we are really concerned with.

We are going to look in detail in the January time frame when we do our data capture trip. We are also going to be conducting interviews with former burial grounds workers and, you know, it just kind of gives you a highlight of the focus of the data capture.

This is all laid out in our data capture plan. The key word analysis, I believe Joe was out there a couple of days ago at INL doing an EDMS search on these very things.

More things that we're interested in, obviously, evaluating the dose assessment feasibility with all these different types of things that we'd normally do in a completeness and adequacy analysis.

CPP pre-1963 our concerns are that, you know -- NIOSH made a determination that about 1963 was when the contamination control really got out of hand to the point where I felt that it was a concern that we wouldn't be able to reconstruct doses for actinides that were not tied to some sort of an indicator radionuclide.

We need to characterize the temporal changes and source terms and exposure potential. We got started reviewing site records that were available on the SRDB and we kind of did a preliminary claimant survey, but it became pretty obvious pretty soon that we were going to have to do worker interviews and more data capture to really produce any kind of meaningful report on this issue.

We need to look at the contamination surveys, particularly the alpha surveys, incident reports, reporting practices for radiation safety units, source and exposure potential documentation for alpha emitters.

Again, this January trip is really

going to be loaded. We've got a lot of things to look at there and a lot of people to interview, so we'll probably be spending a full week there sunrise to sunset.

And that's all I have to say at this point. Questions, comments? Any detailed questions I've got the crew on board if you are interested in details.

CHAIRMAN MELIUS: Questions or comments on either presentation?

(No audible response)

CHAIRMAN MELIUS: Okay. Phil, do you want to do a quick update from the Work Group perspective and then --

MEMBER SCHOFIELD: From the Work Group perspective there is a number of issues that we thought we were going to be voting on the, to make a recommendation on the CPP. We're not ready to do that.

Two groups that stand large in the questions is the security people and the fire department and how they were handled when there was

emergency responses at the CPP because, you know, they weren't all badged for the CPP.

Some of them evidently were and some were not, so how we are going to handle those is a big open question.

So there are a number of things and we don't really have a timeline of when we're going to have recommendation on the CPP at this point.

MR. STIVER: Yes, that's a good point, Phil. I forgot to bring that up. That was something else we discussed at the November 10th meeting.

CHAIRMAN MELIUS: And just so that's something that has to be explored and Tim is aware of it also.

DR. TAULBEE: Oh, yes, yes.

CHAIRMAN MELIUS: I mean, it's not a new issue it's just given all of the, what did you call it, data needs or data demands on the site it even, some of this issues are going to take time to address.

I think what the Work Group agreed to,

at least while I was there, maybe you guys changed your mind after I left, but was that we will get the report from NIOSH, sort of clarification on the current set of I guess you call questionable cases, I don't know what you want to call them, and before our January call if we'll have a Work Group meeting and if, let's look at those results and make the determination if it makes sense to go forward or not on the current SEC's recommendations or do we change.

I think it's parted and I mean I, personally I have concerns about these. You referenced Mound, Tim, that is -- and LaVon or somebody can correct me, but that is I think the only existing site with a Class Definition based on monitoring or should be monitored.

MR. RUTHERFORD: It's the only one I could think of that's based on having a tritium bioassay.

CHAIRMAN MELIUS: Yes, yes.

MR. RUTHERFORD: Having some type of specific --

CHAIRMAN MELIUS: Yes, that's specified in -- so those have not worked well and the more complicated it gets the more harder it is for DOL to implement and I think that's -- so while it can make sense on sort of a general scientific, whatever you want to call it, basis to actually go ahead and implement it we have to take into consideration also, which has been our experience, you know, as we know with many of these Class Definitions.

So we'll continue to be wrestling with this for a while in terms of what to do and so forth with that.

I don't know if the petitioners are on the line and have any comments? You don't have to so --

MR. ZINK: Can you hear me?

CHAIRMAN MELIUS: Yes. Now I can, yes.

MR. ZINK: Yes, this is Brian Zink. I am the authorized representative for [identifying information redacted] and most of the SC&A

narrative was being blocked out by some other folks that were talking on the phone system so I didn't hear a lot of that, but it sounds like there is work to be done before this gets proposed as something to be accepted by the Board, is that correct?

CHAIRMAN MELIUS: That's correct.

MR. ZINK: Okay.

CHAIRMAN MELIUS: And, again, I'm not sure what was blocked, but the Board will consider this. We're having a Work Group meeting before our January call, before our January Board call.

MR. ZINK: Okay.

CHAIRMAN MELIUS: And the Work Group agreed that if we are ready after our Work Group meeting to make a recommendation we could do it at the January call.

It may be at the March call, but there is a lot of work to do on this site and I think as Tim has laid out and John Stiver, so it's going to be -- it's a work in progress and it's hard to give hard and fast deadlines on this.

MR. ZINK: Okay, thank you.

CHAIRMAN MELIUS: The slides for these presentations should be available on the DCAS website and if you need sort of further information to fill you in on what you might have missed on the phone, you can contact NIOSH and we'll work to fill you in on what you might have missed. We apologize for that.

MR. ZINK: That's all right, thank you.

CHAIRMAN MELIUS: Thank you. Any other questions or comments from the Board on this? This is a complicated site and I, sort of, don't know where to start and end with it and it's easy to get lost in the details of it.

MR. ZINK: Can I ask one question?

CHAIRMAN MELIUS: Sure can.

MR. ZINK: The one part I heard of the SC&A report was a reference to 15 percent unmonitored workers and I couldn't quite grasp whether that 15 percent was in total or was that in reference to the proposed year Class that NIOSH had set forth?

CHAIRMAN MELIUS: John, do you want to

clarify that?

MR. STIVER: Yes. That 15 percent was just of all the claims that would fall into that time period. In other words, of how many were monitored, how many weren't.

MR. ZINK: Okay.

MR. STIVER: And I think 85 percent were monitored. Now what we looked for were claimants who were monitored and, you know, would be within that time frame, those people would be in the SEC.

What we were concerned with is how about the ones who would be, you know, have 250 days of employment, aren't monitored, but there is other evidence that might have placed them there at CPP.

So really looking at -- and kind of taking this definition for a road test and see, you know, does it really hold up under scrutiny.

MR. ZINK: Okay. That's kind of what I was getting out is that, because as an authorized representative it's often times where a claimant will say but I was in the building, I was in that

area during this job or that job and then it becomes an issue with the strict definition of having to have the badged evidence.

CHAIRMAN MELIUS: And we want to just make sure -- this is Dr. Melius. We just want to make sure that if we are going to use the badge as evidence that it will properly cover the people that should be eligible for the SEC and the more complicated that gets the harder it is to implement that.

So when there is an exception, even though they may be monitored in some other way, which is what John Stiver was referring to, well is the Department of Labor going to have access to that information readily?

Now they may, they may. This site had good records but we need to make sure that it will be workable.

MR. ZINK: Okay. Thank you.

CHAIRMAN MELIUS: Yes, thank you. Board Members on the phone, do you have any questions? I don't want to ignore you.

MEMBER ZIEMER: No questions from Ziemer.

MEMBER VALERIO: This is Loretta, no questions.

CHAIRMAN MELIUS: Okay, very good.

(Off the record comments)

MR. FROWISS: The petitioner for Livermore is on the line.

MEMBER BEACH: He just said petitioner for Livermore.

CHAIRMAN MELIUS: Oh, okay. I'll do that. Then --

(Off the record comments)

CHAIRMAN MELIUS: Well, but let's go ahead and do the presentation first.

Okay, we didn't want to start the presentation unless you were available on the line.

We'll do the presentation now on the Livermore site and then you'll have an opportunity to, after the Board has had a chance to ask questions we will give you an opportunity to comment if you'd like.

You are not required to, but if you'd like to you can at that time.

MR. FROWISS: Thank you.

MR. KATZ: And just for the record Mr. Schofield is conflicted for Lawrence Livermore so he is recusing himself. Dr. Poston is too, but I don't believe he is on the line.

CHAIRMAN MELIUS: And Brad Clawson I just invited back.

MR. KATZ: Welcome back, Brad.

MEMBER BEACH: He was looking pretty comfortable out there.

CHAIRMAN MELIUS: Yes, yes.

(Off the record comments)

MR. RUTHERFORD: All right. LaVon Rutherford. I am going to do the update on our current status for the Lawrence Livermore National Lab petition evaluation, it's the 1974 to 1995 period.

We'll talk about previous SEC Classes that kind of got us to a certain point, the status of our current review, and we'll also discuss

something that was uncovered during the evaluation.

Lawrence Livermore has actually, we have done two petition evaluations. The first petition evaluation was a Class which Dr. Melius was just talking about where we had a January 1, 1950, through December 31, 1973, and it was originally for badged individuals.

Ultimately, we recognized an issue with that and we had to modify that Class -- And it was a great lead in for you, wasn't it?

CHAIRMAN MELIUS: Yes, yes, yes.

MR. RUTHERFORD: Yes. We had to modify that Class to --

CHAIRMAN MELIUS: You don't think I'd let you get away without doing that. I mean that --

MR. RUTHERFORD: We had to modify that Class Definition to make it all employees because of issues we had noted with that current Class Definition and implementing that Class Definition, so we have a Class currently at Lawrence Livermore

from January 1, 1950, through December 31, 1973.

Our current petition was qualified December 31, 2014. We actually received the petition before that, so it is pushing up, well it is a year since we've had the petition.

We do expect to complete this petition evaluation and present it, or complete it in February and present it at the March Board meeting.

Our focus has been, as with a lot of the National Labs, the exotic radionuclides is what we like to call them, so that's the reason why the petition qualified and it's been a real focus of our evaluation.

Now one thing I will say, the reason why we have taken so long on this petition evaluation is many reasons, but the biggest part of this petition, or biggest reason is the fact that this is a -- most of the work that occurs at Lawrence Livermore is classified and so actually getting information out of there during the data captures and doing all that is difficult because everything goes through classification reviews and a lot of

the information that is classified is not going to be released.

Additionally, the interviews we have done, a lot of interviews that have been classified interviews and as well some of that information will not be released.

I think Lawrence Livermore has been very cooperative with us. They have worked very well in getting us in, access, and getting people available for us to interview. The DOE office locally and headquarters both have been also very helpful.

We have done eight data captures, actually we have one data capture going on this week and then we have one more data capture scheduled in December in support of this evaluation, so that's ten data captures for the year.

As I had mentioned, a large number of these involve classified interviews and classified documents that will likely always remain classified, which also means that difficult in writing this report will be we have to write it in

a way that the classified information, if we need to use any of that information, it's not, it's written in a manner that is acceptable to be released to the public.

Again, a large volume of the data was captured to add the information previously collected for the TBD development and SEC evaluations.

So we had collected a lot of information previously during the previous evaluation TBD efforts and now, additionally, under our current evaluation.

The substantial body of unclassified information that was recently provided has created a delay, so we've gotten, what we did was we went through these data captures, a lot of the unclassified information was recently released to us on disks and it's a significant amount of information that you can read in here.

We actually received 7400 new individual documents and from what we had had originally in the SRDB that was a 62 percent

increase of information, so it's a lot.

The information obtained from the classified interviews and material reports will be developed into an unclassified materials for use in the Evaluation Report, similar to the Hanford approach.

You know, Sam actually, Dr. Glover, who had worked on the Hanford review is also, has been the lead up to this point on the Lawrence Livermore review.

As you know, as we have discussed, Dr. Glover is leaving and so we have a new individual that will transition into this and Dr. Glover will give support on this in this transition and whenever we need him, we hope.

MEMBER CLAWSON: Not the low bidder?

MR. RUTHERFORD: I guess we were the low bidder. NIOSH, ORAU, and ATL worked with the unions and also Lawrence Livermore to further focus on workers who we felt like had not been represented well on previous interviews.

So we've got electricians, plumbers,

and other trades workers and subcontractors that have been involved in that. Many of those are unclassified and are being reviewed by the site for release to NIOSH.

We also, as Stu had mentioned, we had an outreach effort last night, November 17th, and discussed the dose reconstruction, the SEC process, and gave a brief presentation on our current evaluation.

SC&A has participated in almost every data capture effort and because most of the -- we did this for, the main reason the fact that these are classified, a lot of classified data captures and interviews. We don't want to overburden a site with trying to go back and doing these things twice.

And that's typically not done during an SEC evaluation, we normally stay separate. We do our independent evaluation and the Board and SC&A would review that.

But in this case because of the burden of the classified interviews and the classified document review it's more appropriate to do them

together.

One issue that was noted, that came up during this, ORAU had noticed a discrepancy between the expected data identified in the logbooks of in vivo accounting and actual data provided in our case files.

Basically, we had a logbook of in vivo monitoring data that was, actually a few cases we looked at, compared that data to their existing claim that we had and NIOSH, and we noticed it was missing, that data was missing.

So ultimately ORAU and Lawrence Livermore reviewed original case files at Lawrence Livermore and determined that the data did indeed exist and that it had not been included and submitted -- packet for the case file.

So ORAU has undertook the effort to use the in vivo accounting logbooks, and there are 300 to 400 per year, to identify cases with missing information.

And this process is ongoing as Lawrence Livermore is providing more recent logbooks and

supplementing log books which had been, had -- wow.

(Laughter)

MR. RUTHERFORD: A lot of words here.

(Off the record comments)

MR. RUTHERFORD: So ultimately what we are doing is we're going back and we're looking at all of the existing claims that we had and we are comparing the logbooks with in vivo monitoring data to ensure that that data gets put into the claim file.

And then in cases where we determine it was not in the claim file we would have to probably, we will have to redo that dose reconstruction.

Okay. So to date we have identified 186 of those claims with missing data. And thank goodness, questions?

CHAIRMAN MELIUS: Any questions for LaVon?

(No audible response)

CHAIRMAN MELIUS: So you said there were many reasons why this was delayed. Are you counting each one of those 7400 new documents as

a separate reason?

MR. RUTHERFORD: Well, again, it's a good idea.

CHAIRMAN MELIUS: Yes.

MR. RUTHERFORD: Yes. You know, we originally, we had one individual that was reviewing the documents, the classified documents, and that put a pretty heavy burden on that individual.

Greg Lewis has worked, and done a great job of correcting that situation, so that was one major issue that we had.

CHAIRMAN MELIUS: So now we have two reasons.

MR. RUTHERFORD: Yes, two, and 7400.

CHAIRMAN MELIUS: 7400, yes, yes. Yes, okay. Board Members on the phone with any questions?

MEMBER ZIEMER: No questions here.

MEMBER VALERIO: No questions here.

CHAIRMAN MELIUS: Okay, thank you. Now I will say that it's good to see that you were

able to identify an issue and follow up on it even while the evaluation was under way, because I think that's --

MR. RUTHERFORD: Oh, yes. Yes, I agree.

CHAIRMAN MELIUS: You know, these take a while and we can understand that. The one other thing I would mention, maybe not as a complaint but more as suggestion, is that if you're going to do an outreach meeting in conjunction with a Board meeting it might have been helpful to, you know, sort of ask if any Board Members wanted to join or SC&A join on that simply because, just --

(Simultaneous speaking)

MR. RUTHERFORD: Yes, it makes sense.

CHAIRMAN MELIUS: But future reference. I'm glad you did because of the nature of the site and how disperse the worker population is.

MR. RUTHERFORD: Okay.

CHAIRMAN MELIUS: But, yes, and we'll find someone to volunteer for the meeting.

MEMBER BEACH: So I am curious, how was the turnout last night?

MR. RUTHERFORD: Well, I think you said, I think we had 12 to 15 somewhere around there.

CHAIRMAN MELIUS: Yes.

MR. RUTHERFORD: Yes, and it was nice because, I mean not that the number was as high as we would like, but they were very, you know, involved, so it was good.

MEMBER BEACH: Yes.

CHAIRMAN MELIUS: No, that is good.

MEMBER MUNN: You can interact with them much better at that level.

CHAIRMAN MELIUS: Good, good. Rather in front of a Board meeting.

MEMBER MUNN: Yes.

CHAIRMAN MELIUS: Yes. Okay. No further comments? Oh, Dave?

MEMBER KOTELCHUCK: Roughly how many people work at that site, are we talking hundreds, thousands?

MEMBER MUNN: Hundreds.

MR. RUTHERFORD: You know, I would say hundreds myself, but I don't know for sure. That's something I didn't look into. I am sure if Dr. Glover was here he could tell that. He didn't -- but I can get you that information, how's that.

CHAIRMAN MELIUS: When you debrief him maybe --

(Laughter)

MR. RUTHERFORD: Yes.

(Simultaneous speaking)

MEMBER KOTELCHUCK: If it's different than hundreds tell us.

MR. RUTHERFORD: Yes.

MEMBER KOTELCHUCK: Otherwise, then --

MR. RUTHERFORD: Okay, yes.

CHAIRMAN MELIUS: Good. Okay. No further questions, why don't we take a short break. I'd rather --

(Off the record comments)

CHAIRMAN MELIUS: Oh, excuse me, I'm sorry, yes. I apologize, does the petitioner wish

to make any comments now?

MR. FROWISS: Just very briefly, Dr. Melius.

CHAIRMAN MELIUS: Yes.

MR. FROWISS: This is Albert B. Frowiss, F-R-O-W-I-S-S, Sr.

CHAIRMAN MELIUS: Yes.

MR. FROWISS: I am an advocate and I am the authorized rep for my co-petitioner, [identifying information redacted], who is in Washington D.C. today so he is unable to be here.

But, you know, I just wanted to get my name in the record, my P.O. Box [identifying information redacted].

CHAIRMAN MELIUS: Okay.

MR. FROWISS: My phone number is [identifying information redacted]. And that's basically it. I'll sit back and wait for you to finish your work.

CHAIRMAN MELIUS: Okay. And you just heard by March there should be report.

MR. FROWISS: Thank you.

CHAIRMAN MELIUS: Good. Okay. Sorry to jump the gun, but let's take a break for about 15 minutes. At 5 o'clock we'll start the public comment period.

(Whereupon, the above-entitled matter went off the record at 4:44 p.m. and resumed at 5:03 p.m.)

CHAIRMAN MELIUS: Okay. We're going to start our public comment period. And let me have Ted Katz give the instructions.

MR. KATZ: Right. So for folks on the line and in the room who have public comments, just an understanding of the situation with your comments, your comments become part of the record, the transcript of this meeting. And all of the Board meetings are transcribed. And those transcripts are publicly available on the NIOSH website.

So everything you say will be available for public scrutiny. The exception to that is if you discuss other individuals. Their personal information will be redacted to the extent to

protect their privacy.

So you're free to say whatever you might want to say about your own personal situation, interests, et cetera. But we will protect the privacy of other people you may identify in your talk. That's not to keep you from identifying them. And that's it.

CHAIRMAN MELIUS: Okay. And I think our first speaker, Scott, is it Yundt, or what? I can't --

(Off the record comments)

MR. KATZ: So someone on the line has not muted their phone. Please press * and 6, everyone on the line right now mute their phone, press * and 6. I think that did it. Thank you. Okay.

CHAIRMAN MELIUS: Okay.

MR. YUNDT: Hi. My name is Scott Yundt.

CHAIRMAN MELIUS: Yundt. Well, it's Yundt, okay.

MR. YUNDT: And I'm with Tri-Valley

CAREs, CAREs is an acronym that stands for Communities Against a Radioactive Environment. I'm the staff attorney there. Since the year 2000, we have organized a sick worker support group for Livermore Lab and Sandia, California, employees. We have about 250 members.

Well, I should say we have had that amount over the years. Many of them have passed away. But some of them have survivors who stay involved.

So I come to speak a little bit on behalf of the support group and on behalf of myself in terms of this work. I do do some authorized representative work when people really need it, but for the most part, I help workers take care of their own claims on a pro-bono basis.

I am appreciative of the Advisory Board's work and you guys being out here. So thank you for being here.

I wanted to -- I just caught a question before we took a break which was how many employees are at Livermore Lab. According to their own

website it's 5,800 staff members, and then there's typically between 1,500 and 2,000 additional subcontractors there at any given time. And it's been higher in the past. They've had up to 10,500 staff members at times, you know, especially at the height of the Cold War in the '80s and 70's.

So regarding the Special Exposure Cohort, I'm obviously not an employee and can't speak directly to the conditions there, however I have met and spoken with hundreds of employees and many dozens from the period of the extension.

And they have -- I often get reports from them of how surprised they are at their dose reconstructions. They are surprised at how low they are. They have memories of not turning in dosimeters, of being told to not turn in dosimeters which, you know, should result in a higher dose reconstruction for that period coming back. But I just wanted to forward the dismay that many of the employees from this period have at how low their dose reconstructions are.

You know, Livermore Lab is a somewhat

unique facility in that there're 600 buildings in one square mile in very close proximity. And many employees work in multiple sites and go into lots of different areas in the course of their employment. And so also, many have expressed to me that their job descriptions that are used are not accurate to what they were actually doing in their work days.

I also wanted to mention a couple of specific things. One is that they've had a couple of employees who've had appendix cancer over the years and gotten denied. And there was a recent clarification that, for purposes of Special Exposure Cohorts, appendix cancer will now be considered part of the colon.

I know this may be out of purview of the Board, but I just thought it was important to mention, because I have now heard also that it's become colloquial or legend that you don't get covered if you had appendix cancer.

So the change has not gone well-documented. When you look at information

online, you don't see that appendix cancer is a covered cancer. I'm just bringing that to light, because I can't correct that rumor all on my own.

CHAIRMAN MELIUS: I think that could be corrected on the NIOSH website, the list of covered cancers, I believe.

MR. HINNEFELD: Well, we generally don't publish interpretations. You know, there's a listed set. And there's no reason why we couldn't put something up. We'll have to figure out how to organize it so it could be found.

But, you know, there's a specified list of cancers in the statute, and that's what we use. Now, the Department of Labor will interpret, you know, what do these words in the statute translate into in terms of actual diagnoses. You know, the Department of Labor makes those interpretations. And if we know about it, we could put some information on our website about it if we can figure out where to put it where it would be found.

CHAIRMAN MELIUS: And we've had, I hate to digress here, but with the World Trade Center

cancer, we actually, we had issues. Because rare cancers are covered under that. And, well, what's a rare cancer? You know, a lay person's not going to understand that and, you know, varying definitions. And so putting out clarification on that's important.

And it also is, you know, diagnoses are not always clear in terms of, you know, subtypes of cancers and so forth. So the lay person isn't going to understand them. And I think people are reluctant to file if they don't think they're going to be covered.

MR. YUNDT: Precisely.

CHAIRMAN MELIUS: Basically, yes.

MR. YUNDT: It's helpful that rule clarification occurred in EEOICPA Transmittal Number 15-06 in June of 2005.

I also wanted to just mention a fairly recent study that I'm sure you know of by David Richardson called "Risk of cancer from occupational exposure to ionising radiation, retrospective cohort study of workers in France, the UK and the

United States." I'm curious how the Advisory Board and how the program will consider this study.

And I think I'll leave my comments there. Thank you guys so much.

CHAIRMAN MELIUS: By the way, Dr. Richardson is a member of the Board.

MR. YUNDT: Oh, okay. Sorry for not knowing that.

CHAIRMAN MELIUS: So he hasn't shared the study with us yet.

(Off the record comments)

MR. KATZ: Excuse me, there's someone on the line, not muted and speaking. Please mute your phone on the line.

CHAIRMAN MELIUS: One thing that would be helpful, I know you listed your contact information here on the, when you signed in for public comment. But one thing that would be helpful is, if you could help both NIOSH and then when the Board and through our contractor goes to review the SEC Evaluation Report, to help us put in contact with workers.

I mean, one of the hardest things to do is to track down workers that can provide information on a particular time period, or a particular exposure or something. And struggling with the nature of sort of classified information at these sites and so forth, it's sort of even more critical at a site like Lawrence Livermore. So if you wouldn't mind.

And then again, it's obviously voluntary on the part of the person. But having a contact, and understanding what's happening at a site and being able to, you know, get more information directly from the workers is really helpful.

MR. YUNDT: Sure, I'd love to help with that. And I do have some people in mind who I'll speak to. The people who would have been the best already died.

CHAIRMAN MELIUS: And that's unfortunate but --

MR. YUNDT: Which is a difficult part of this.

CHAIRMAN MELIUS: Yes. I know. The current, the petition under review is more recent. I was thinking that also, but 74, 95 now. It allows people to be quite old, and may very well have died and obviously with cancer and so forth. It's some probability of that.

But, you know, for the more recent time periods and so forth, they can provide -- or they may know someone that's retired that, you know, worked in the same area and so forth which is useful.

MR. YUNDT: Sure. They don't have to be a sick employee.

CHAIRMAN MELIUS: Right, yes. Good. Anyway --

MR. YUNDT: Thank you.

CHAIRMAN MELIUS: Thank you very much, yes. Okay. Is there any -- I don't believe we have anybody else in the audience who is here in person who wishes to comment. I think we do have people on the telephone. Is there anybody on the telephone who wants to comment on the Lawrence Livermore site?

(No audible response)

CHAIRMAN MELIUS: If not, then I have one person signed up on the, who signed up ahead of time for the phone. And that's Dr. Dan McKeel. Dr. McKeel, are you on the line?

DR. MCKEEL: Yes, I am, Dr. Melius. Can you hear me?

CHAIRMAN MELIUS: Yes, we can.

DR. MCKEEL: Okay.

CHAIRMAN MELIUS: And we've received your written comments today. And Ted Katz has distributed them to the Board Members.

DR. MCKEEL: Thank you very much. There were a couple of papers attached that I wanted people to be sure they had. So that helps me a lot.

CHAIRMAN MELIUS: Okay.

DR. MCKEEL: All right?

CHAIRMAN MELIUS: Yes, go ahead.

DR. MCKEEL: I'll say good afternoon to the Board. I'm Dan McKeel. I'm a Triple-SEC co-petitioner for the General Steel industries, GSI, Dow Madison and Texas City Chemicals AWE sites.

I'd like to make a few remarks about the Dow Madison site. The current Board chair at the 11/6/14 ABRWH meeting tasked SC&A to review Dow Madison PER 058 and my review paper of the same report. SC&A never did that.

The current Board chair also indicated to me he would decide whether the Procedures Review Subcommittee would review Dow PER O58, which was based on Appendix C, Rev 1, after the next Board meeting. That would be in January. This intention also was never fulfilled.

My White Paper critiquing Dow PER 58 was based on FOIA information. And that paper has never been acknowledged or discussed, even, by the SEC Issues Work Group, including the SC&A and DCAS, NIOSH Members or the full Board, all of whom were sent copies a while back and now.

The focus of my PER 58 review was to make an XY plot of the pre-PER 58 and PER 58 total radiation dose and the PoC percentage values of the 80 Dow Madison claimed in that PER. I wanted to test the assertion in the PER 58 that is as follows.

It says, I quote, "Together these result in at least some increased dose for all cases in the operational and residual periods." This statement, that's the end quote, this statement turned out not to be true. Less than half of the 80 Dow total radiation doses were increased. No PoC equaled or exceeded 50 percent. And notably, there were numerous examples when total dose and PoC percentages went in different directions. The scatter in the dose versus PoC percentage data was very wide, and it's my feeling that PER 58 needs to be scrutinized and probably revised.

And a few remarks about General Steel Industries, and I note that Dr. Ziemer omitted an important paper of mine, the November the 2nd, 2015, critique of SC&A's review of the David Allen 7/10/15 White Paper, during today's TBD-6000 workgroup session. And I re-circulated a copy of that Paper.

At this juncture, I feel there have been massive delays in revising the GSI Site Profile documents, TBD-6000 and Appendix BB. And it concerns me greatly that GSI claimants have been

financially harmed by postponing their compensation unduly.

Appendix BB, Rev 0 was issued 6/25/2007. SC&A reviewed Rev 0 and issued 13 findings. But Rev 0 was not revised until Rev 1 was issued on June the 6th, 2014, almost seven years later, despite massive influx of new petitioner and site expert worker dose reconstruction information.

SC&A's ten major Appendix BB, Rev 1 findings were not closed until the November 3rd, 2015, TBD-6000 Work Group meeting. The full Board is now being asked at this meeting to approve closing Appendix BB, Rev 1 findings to allow NIOSH to generate Appendix BB, Rev 2. And as we know, that was done earlier today.

It is unclear whether Rev 2 will have the overall effect of being claimant-favorable or claimant-adverse. The TBD-6000 workgroup chose to overrule my many scientific and procedural concerns about resolution of Appendix BB, Rev 1 findings during their February and November 2015 meetings.

GSI PER 57 was issued on March the 11th,

2015. This PER was groundbreaking, because it included 196 previously denied Part B claims. The PER 57 dose reconstruction development summary reports, which I obtained through a FOIA request, confirmed that 100 PER 57 PoCs equaled or exceeded 50 percent.

At least 79 of these 100 probably compensable GSI claims have thus far reached NIOSH for DRE work. Eleven remain at NIOSH as of last Monday. And DOL statistics by state indicate 20 of the 100 PER 57 or 20 percent have actually been paid by DOL in the intervening eight months.

This pace seems very slow to me, especially since the reworked DRs of the third dose and PoC calculations done by NIOSH/DOL.

Sadly, 13 percent of the 100 GSI PER 57 approved claims, probably compensable claims, are attributed to deceased persons with no known survivors. And these 13 claims may lapse.

Like Scott Yundt just did, we have offered DOL, if they will provide the names to us of those dead persons with no known survivors, we'd

be glad to help try to find them.

GSI SEC 105 qualified in May 2008 and was denied by the Board on a nine to eight vote on December the 11th, 2012. The TBD-6000 workgroup and NIOSH assured the full Board that external and internal dose reconstruction was feasible and all 13 SC&A Appendix BB, Rev 0 findings were closed or placed in abeyance awaiting a first revision of Appendix BB, Rev 0.

The GSI SEC 105 petitioners filed an administrative review request with HHS on April the 17th, 2013. We cited 44 specific errors NIOSH had made in recommending that SEC 105 be denied.

This administrative review is still pending under Section 8318 which makes it so that the petitioners cannot know the names, job titles, credentials, meeting dates or content of the three member independent HHS ad hoc review panel as Dr. Jones reviewed this morning.

On April the 10th, 2014, I filed a CDC FOIA request for the GSI SEC 105 records that had been sent to the three member HHS review panel for

the SEC 105 Administrative Review.

FOIA officers then subdivided this FOIA request into a PSC HHS portion, a CDC main portion and a portion they sent to DOE headquarters which headquarters then delegated further to the legacy management component. That last part of the FOIA extension was just acknowledged this week after an 18 month delay.

To date, I have received about 1,700 pages of interim records. But the majority of those do not appear on first review to be truly responsive to my straightforward FOIA request which was to provide me with copies of the same material the HHS independent reviewers were given way back in January of 2014.

I regard these responses as evidence of censorship. I petition this Board and NIOSH to urge Congress to amend the SEC Administrative Review process to make it more open and transparent.

And finally, I have some parting or last remarks to make concerning the dose reconstruction reviews that were discussed today. This comment is

in reference to the workgroup meeting held on November the 5th, 2015. A statistical summary covered 334 dose reconstruction reviews conducted by the Board representing 0.9 percent of completed DRs to date.

What struck me the most when I obtained the statistical report was the gross disparity in DOE and AWE Site Reviews to date. Four GSI cases were included and none from Dow Madison or Texas City Chemicals, all AWE sites. Seemed to me that well over 95 percent of the 334 cases were larger DOE sites that comprise only about a third of all covered EEOICPA sites.

This background raises the serious and concerning question, do NIOSH and the Board consider AWE sites to be unimportant? What are the reasons between the gross disparity of the DOE/AWE site nine-to-one ratio for completed DR reviews, a fact that would disturb any statistician interested in representative data sampling?

One possibility for this disparity is that the scientific basis and validity of dose

reconstructions performed by NIOSH, ORAU and many AWE sites rests almost entirely on surrogate data. This is certainly the case at all three of my AWE sites.

The GSI petitioners cited improper use of surrogate data as their Error Number 20 of 44 in their GSI SEC 105 Administrative Review application. The Board surrogate data criteria were first formulated and evaluated --

CHAIRMAN MELIUS: Dr. McKeel, you need to wrap up please.

DR. MCKEEL: I am. I've got two more sentences. The Board surrogate data criteria were first formulated and evaluated at the Dow Madison and Texas City AWE sites. And neither of those two sites had any film badge data.

These factors, inability to reach to the 2.5 percent DR review goal in 13 years, non-random selection of dose reconstruction, gross oversampling of DOE compared to the majority AWE small sites, all severely compromise the utility of the entire dose reconstruction review process.

Thank you for letting me address the Board.

CHAIRMAN MELIUS: Are there any other people on the phone who wish to make public comments?

MS. JESKE: Yes, I do. This is Patricia Jeske. I'm the petitioner.

CHAIRMAN MELIUS: Go ahead.

MS. JESKE: Okay. You know, I'm not scientifically involved. And I think everybody knows that. If it hadn't been for Dr. McKeel and [identifying information redacted], this SEC would have died a long time ago.

But I do want to talk from my personal experiences. And I am -- I have a claim with GSI SEC with siblings. There's 11 of us actually on one claim. And I represent another relative. I just want to talk a little bit about what's happened there.

We had a -- I've been trying to get a dose reconstruction development report. And I contacted NIOSH first by certified mail. And I was called rather quickly by Nancy. I waited a while

before I returned her call, but I did return her call.

And she didn't seem to think that I knew what I wanted. And I told her that I wanted it because we want to help people. You know, there might be something in there somehow that we can help people.

She said, well, everything, the way we do it is all on the website, that we could go there and get the information that we needed there. But she said I would have to go through Department of Labor to get that, that they had recommended compensation on both claims and that they were done at that point.

She talked a little bit further. She was very thorough and helpful. But she said that she didn't feel we needed the SEC now, that we have 75 percent of the GSI claimants are now being paid. And as Dr. McKeel said, most of them haven't, just 20 percent. But they're being recommended to be.

She said something that bothered me. Now, if they only have something like prostate,

well, that's a different matter, because lots of people get prostate. And those people may very well not be compensated. Well, prostate cancer on the relative that I represent started out with prostate and ended up with leukemia. So to say that just kind of concerns me.

And that particular case, the PoC with the leukemia and the prostate, before this last dose reconstruction, before all the changes were made for Appendix BB, Rev 1, it was 15.9. And it raised to 68.8 after the new dose reconstruction, you know. So that tells me that with prostate it can develop into more, because it developed into more for him.

And I went through, when he got the leukemia I had to get all kinds of doctors' reports and hospital reports. And I just can't begin to tell you, I had to threaten them with HIPAA, because they weren't releasing things. It was just very drawn out.

But I had Dr. McKeel to lead me through this. The public doesn't have that. I did have that. I was very fortunate to have someone like

that to assist me through it. Otherwise I wouldn't have -- and I'm the petitioner. I would not have known, you know, what to do. So yes, I'm a little concerned about people that have prostate cancer, it becoming more than that.

Then the other -- so then I called one of the claims managers at DOL to ask for this developmental dose reconstruction, developmental report. She said she'd have to have it in writing. So I put it in writing. And it was received on the 9th of November. And that may not be time enough to get back to me. But so far I have not heard anything on that.

Can anyone tell me if that's, if I am wrong and should not have that report, as my, you know, as being a claimant myself on one and then the representative on the other? Am I asking for something that's forbidden here? I didn't think I was.

(No audible response)

MS. JESKE: No one knows? Okay, well that's fine.

CHAIRMAN MELIUS: Stu, do you want to ask the -- I didn't know what --

MR. HINNEFELD: Well, this is Stu Hinnefeld. And I'm not familiar with the dose reconstruction developmental report. Is that something that, you know, you say you'd contacted the Department of Labor, and they apparently are the ones who prepare that?

MS. JESKE: Well, NIOSH, from what I understand, NIOSH should have it and so should Department of Labor. But it is now closed through NIOSH, so she says.

MR. HINNEFELD: Well, you know, we complete something called a Dose Reconstruction Report, but that would have been sent to you. And that would have been then sent on, and we also send that to the Department of Labor. And then they do some things in order to arrive at a recommended and ultimately final decision.

So I guess I don't know what you're asking. If it's something that the Department of Labor prepares in the process of going from our dose

reconstruction report to a recommended and final decision, that's something I'm not familiar with. And so I don't know. And it would be a Department of Labor question about whether --

DR. MCKEEL: Mr. Hinnefeld, this is --

MR. HINNEFELD: -- it could be made public or not.

DR. MCKEEL: Mr. Hinnefeld, this is Dan McKeel. May I please comment that I have been sent 80 of those dose reconstruction development reports for PER 058 for Dow and 194 of them for PER 057 for GSI. And they are reports called by that name prepared by NIOSH, by your division.

MR. HINNEFELD: Okay. Now I understand --

DR. MCKEEL: So that's --

MR. HINNEFELD: Okay. Now I understand the document we're talking about.

DR. MCKEEL: Okay.

MR. HINNEFELD: I will have to look into Ms. Jeske's request and see what happened there.

DR. MCKEEL: Thank you very much.

MR. HINNEFELD: So I'll look into that.

MS. JESKE: Okay. All right. I probably explained it incorrectly. I am sorry --

DR. MCKEEL: I apologize then.

MR. HINNEFELD: No, I just didn't understand the term that apparently we use for that, for that document.

DR. MCKEEL: I apologize for interrupting. Thank you.

CHAIRMAN MELIUS: Okay. Anybody else on the line wish to make public comments?

MR. REAVIS: Yes, can you hear me?

MS. LUDWIG TALBOT: Yes, please. Hello?

MR. REAVIS: Yes. There's a couple of people on the line. Go ahead, ma'am.

MS. LUDWIG TALBOT: Okay. Is it okay to speak?

CHAIRMAN MELIUS: Yes. Go ahead and identify yourself.

MS. LUDWIG CALBOT: Okay. My name is Cathy Ludwig Calbot. And I'm a claimant from the

Pinellas Plant on my father. Thank you for letting me listen. This is my first conference. It was very informative.

Just a couple of things that I want to note. Dr. Melius and the Advisory Board, I'm not sure that you recognize my name. I have sent a letter to yourself and to Dr. Melius. I have a couple of questions, and I'm hoping you can point me in the right direction.

My father's re-work is under its third dose reconstruction at NIOSH. And there's a lot of reasons for that. And one thing I want to point out, I've become a voice for a lot of Pinellas Plant workers.

Just some statistics that I'm sure you're all aware of, 648 cases, 102 approved. We're approaching 500 deceased employees. We've applied four times for the SEC. It's not even gotten past the review process. We're working on that right now. We hope to do better on the next one.

I have a couple of things that I want to

make public knowledge. Back on October 13th of 2011, SC&A did a Work Group update. And we are, as a group, concerned about the site interviews that were conducted.

Notes were taken by DOE, classification and redacted material was sent back to SC&A. SC&A was supposed to finalize the notes and return to the interviewees for their input. That never happened. That's sitting out there, you know, in never-never land.

I'm just a layman, so you'll have to pardon my passion. I'm a bit emotional on this, approaching my father's 20th anniversary of his death. His dose reconstruction is being done under a directive from national. I can't tell you how much I appreciate Jeff Kotsch and Rodney's help on this.

I have climbed up every ladder I possibly could to make sure that this dose reconstruction is done to statute, and to regulation and on a level playing field. What they left -- my father's dose reconstruction came in at

43.8.

And they left out his additional employment at Sandia Lab, his temporary plant exposure, his photofluorography exposure, his Heather Project exposure, deconstructive testing which is still up in the air, neutron doses and metal tritides, among a lot of other things.

If you can imagine if I were a scientist, or I were on the Board and I was a health physicist, what my father's dose reconstruction would come back -- if all the information was done and pulled from the records.

I have to interject here about the Department of Labor. I did not know until about six months ago that I could file for my father's medical and employment history through the Freedom of Information Act.

A lot of the things that were put on the burden of proof on myself, and on my brother and on my mother before she passed away in '09 were in those files.

Now that the dose reconstruction is

being done, I have found out that the Department of Labor was aware and had those very same files. Because my case examiner told me word for word, "Oh yes, that's in the file. I found that." So they're asking me to prove some X-ray information. I put that disk in there and X-rays pop up.

So I would like very much to have a conversation with someone. And I don't know under what cover, Dr. Melius, Advisory Board, that that comes under. A Working Group, the last time they did a Working Group on the Pinellas Plant was 2012. There are so many things out there pending that didn't seem to be completed.

And again, as just a daughter trying to make it right for her father and for 500 employees who can't speak for themselves anymore, I know that's a disturbing factor, it really is. It's disturbing to me because I grew up at that plant. Those people were like my family. And I feel like I have the right to be emotional and to be expected to understand this.

Again, like the lady on the phone before

me, I'm not a scientist. But I'm highly educated, and I understand a lot of this. And I've spent the last 18 months digging for stuff that the Department of Labor already had.

So I am just -- I sat through this whole meeting from the East Coast so I could at least get some concerns out there. I am concerned that my case examiner is the same one who has not been forthcoming with me, or my brother or my mother when she was alive. And my mother was a 70 year old woman who couldn't navigate a digital phone, let alone a rotary, I mean a rotary phone, let alone a digital.

So I don't know what these people do out there. I thank God for advocates, and I thank Heaven for people like Jeff Kotsch, and Rodney and even Wendell Perez in FAB who helped me navigate this and gave me the time to research it. There's a lot of things at the Pinellas Plant, and I listen to all the large companies.

CHAIRMAN MELIUS: Ma'am, can you please wrap up. Your time's about up.

MS. LUDWIG CALBOT: Sure. I would be

happy to. I would just like to know how to get a hold of the Advisory Board. Because my emails are not being answered. How's that for one last wrap-up?

CHAIRMAN MELIUS: Well, your email was from last week. And I will tell you that the Advisory Board has received it.

MS. LUDWIG CALBOT: Okay.

CHAIRMAN MELIUS: It was addressed to many other people. And the Advisory Board, as a matter of policy, does not comment on ongoing dose reconstructions.

MS. LUDWIG CALBOT: Okay, okay.

CHAIRMAN MELIUS: And we will communicate that back to you officially.

MS. LUDWIG CALBOT: That would be wonderful. I don't know the process. I'm just learning it.

CHAIRMAN MELIUS: No, that's fine. I understand.

MS. LUDWIG CALBOT: I'm just trying to copy everybody, you know, that that's what you guys need to know. And there's many other things going

on at the Pinellas Plant. So hopefully we'll be able to bring it to fruition here.

CHAIRMAN MELIUS: Okay. Thank you.

MS. LUDWIG CALBOT: Thank you.

CHAIRMAN MELIUS: And just so you know on Pinellas, there will be a Work Group meeting in February. And the Board will be holding their Board meeting in the Pinellas area in March.

Okay, anybody else on the line that wishes to make public comments?

MR. REAVIS: Can the Board hear me?

CHAIRMAN MELIUS: Yes.

MR. REAVIS: Yes, okay. My name is Rick Reavis. I'm calling a little bit about Blockson Chemical. And also I want to talk about a new Board that may have been created. So I want to thank you people first of all for giving me this opportunity to speak.

I have a few questions, as I said. One is about a new Board that was supposed to have been created this year, 2015. I do believe this Board was initiated to help the EEOICPA and the Law of

2000. Do you folks know about that Board? And I might correct --

(Off the record comments)

CHAIRMAN MELIUS: We're the Board. The Board has not been appointed yet.

MR. REAVIS: Oh, it has not been appointed?

CHAIRMAN MELIUS: No.

MR. REAVIS: Let me ask you, when that Board is appointed, what's going to be the purpose of the Board?

CHAIRMAN MELIUS: It will be advising the Department of Labor.

MR. REAVIS: Okay. Now, will it be over or under the DOL?

CHAIRMAN MELIUS: It would be parallel, provides advice to the --

MR. REAVIS: Parallel, okay.

CHAIRMAN MELIUS: -- Department of Labor.

MR. REAVIS: Yes, okay. Thank you.

CHAIRMAN MELIUS: Yes.

MR. REAVIS: Is it -- one more question. Is it going to be comprised of just scientists, or who's going to be on that Board?

CHAIRMAN MELIUS: There's a, the legislation that set up the Board set up a whole series of criteria for how many people are on the Board and what their qualifications are. So there's a mixture of people.

MR. REAVIS: Okay. Not necessarily scientists, because that's what I had been told before.

Now in regards to Blockson, I would like to talk about, and maybe the Board is aware of this one-page document. It was created in 1963. And it was used to back up Blockson's SEC from 1962 to 1960. Are Board Members aware of that document? Have they seen it, any of the Board Members?

CHAIRMAN MELIUS: Well, the Board dealt with Blockson quite a while ago, so --

MR. REAVIS: Quite a while ago, yes. And I've been dealing with the Board and Blockson and everybody else for quite a while myself.

But this document, it's a one page document. Nobody seems to know where it came from, who it was addressed to, who received it, anything about that document. They don't know who generated it.

They used that one-page document to undo years, about ten years of work on Blockson that were -- Department of Energy, Stokes, other companies used documents stating, they all state that Blockson's production ended in March 31st of '62. This one document undid all of that.

It's a document that, I think it's been in question for quite a while. It looks like it's computer generated. Back in 1963, it certainly wouldn't have been computer generated. It would have been typed.

And I was just wondering if anybody would want to take a good look at that document, maybe have a document examiner since there's so much credence been on that document. Maybe somebody should take a good look at it, get a typewriter document examiner to look at it to see if it was,

in fact, typed in 1962. What's the Board's feeling on that?

CHAIRMAN MELIUS: Well, I think we're just taking comments now. We're not going to be able to respond to specific requests like that.

MR. REAVIS: Yes, okay. Well, that's good enough for now. I appreciate again your time. And perhaps later some of the Board Members can take a little time to look at that one page document. It's a very important document. With that document, there was 23 people that didn't get paid at Blockson. Thank you very much for your time.

CHAIRMAN MELIUS: Okay, thank you. Anybody else on the phone wish to make public comment?

MS. PADILLA: Yes. My name is Judy Padilla from Rocky Flats.

CHAIRMAN MELIUS: Hello.

MS. PADILLA: Yes?

CHAIRMAN MELIUS: Go ahead.

MS. PADILLA: On October 28th of 2015 at the telephone conference call, Ms. Wanda Munn made

a comment about the Board being pilloried for time delays. I agree. You should be. Rocky Flats has been shut down now for ten years. It has been 25 years since the FBI raid and 23 years since the Rocky Flats federal grand jury verdict. It has been a decade since the first Rocky Flats SEC was submitted and four years for the latest, Number 192.

When Rocky Flats SEC Number 227 was filed in 2015, it did not qualify on the grounds that the information had already been provided. If the information was there, why has it taken so long for you knowledgeable, educated people to read and understand it?

Are you confused about the evidence it takes to indict a contractor for criminal activity? Do you have a problem understanding a grand jury report which plainly states that a contractor, Rockwell International, lied and put the public and workers at risk? What part of criminal malfeasance is confusing?

How many of the other nuclear plants have been indicted, tried by a federal grand jury

and found guilty of crimes against the environment and humanity? Isn't the Flats the one and only?

In order to help you familiarize yourselves with the grand jury report, I will quote from some of the pages of Federal Judge Sherman Finesilver's 23 page report. And I quote, Page 3, "The grand jury now renders to the court this report regarding ongoing, organized criminal activity at the Rocky Flats plant in this federal judicial district of Colorado. This report is based on preponderance of the evidence considered by the grand jury.

"For 40 years, federal, Colorado, and local regulators and elected officials have been unable to make DOE and the corporate operators of the plant obey the law. Indeed, the plant has been and continues to be operated by government and corporate employees who have placed themselves above the law and who have hidden their illegal conduct behind the public's trust by engaging in a continuing campaign of distraction, deception and dishonesty."

Page Number 4, and I quote, "Number 1, the government agencies failed repeatedly in their duty to protect the public's interest. Number 2, Colorado Department of Health, the Department of Energy and the Environmental Protection Agency did not perform adequately their oversight and regulatory function.

"Number 3, DOE managed the plant with an attitude of indifference. Number 4, DOE's plant manager made false written statements with knowledge of the falsity of his statements or with a disregard for knowing whether his statements were false."

Page Number 5, and I quote, "DOE officials either ignored such notices from Rockwell, joined with Rockwell in rationalizing such conduct or actively participated in plans to shield Rockwell from attack and conceal potentially damaging information from being disclosed to the public or regulatory agencies.

"Since this grand jury cannot indict a federal agency for violating the laws, DOE is

identified in this report and the grand jury's presentments of evidence to this court of criminal misconduct as an unindicted co-conspirator with Rockwell, EG&G and certain individuals in an ongoing conspiracy to violate certain laws of the United States.

"In this sense, the DOE has become a self-regulating agency which is above the law and without accountability except to this grand jury. DOE did not attempt to review critically, verify independently or evaluate systematically any data, information, analysis, recommendation or conclusion which Rockwell provided to DOE."

These are all direct quotes from the grand jury report. Page Number 6, and I quote, "The government's inspectors have tended to overlook obvious health hazards and environmental crimes committed at the plant because their focus was too narrow."

Page Number 9, and I quote, "The root of the problem at the plant was and continues to be the negligent mismanagement of waste at the Rocky

Flats plant originating with DOE's aggressive efforts to place the plant and its operators above the environmental law by which all other companies must abide.

"The grand jury believes that the DOE feared the regulators would discover Rockwell's mismanagement of hazardous waste and radioactive mixed waste at the plant. Yet Congress enacted criminal penalties in RCRA, the Clean Water Act and other federal laws which have been violated at the Rocky Flats plant with the express intent to stop negligent practices.

"It is an elementary principle of law that ignorance of the law is no excuse for criminal conduct. The jury specifically rejects the notion that government employees should be allowed to hide behind the ill-reasoned logic of a government attorney at the plant and other DOE attorneys in Washington, D.C., whose objectives seem to be to thwart attempts to subject Rocky Flats plant to the rule of law."

On Page 18, "In 1988 DOE performed an

internal audit on the risks which its various facilities posed to public health. At the time, DOE rated the extensive contamination of groundwater at Rocky Flats as the number one environmental hazard among all of DOE's facilities in the United States.

"The DOE reached its conclusion because the groundwater contamination was so extensive, toxic and migrating towards the drinking water supplies for the cities of Westminster and Broomfield, Colorado."

Page 19, "Rockwell controlled all of the material, information, data and analysis regarding matters at the plant. Since Rockwell often failed to disclose all of the relevant facts to DOE's employees, Rockwell and its managers were able to consistently manipulate and control DOE policy to assure that DOE endorsed Rockwell's illegal conduct in pursuit of very large bonuses and contract fee awards, to the extent to which DOE may have authorized Rockwell to break the law.

"DOE acted more often than not at

Rockwell's direction and after Rockwell had independently formed intent to break the law. Rockwell conspired with certain DOE officials over a period of years" --

CHAIRMAN MELIUS: Excuse me. You're going to need to wrap up, please.

MS. PADILLA: Yes, I'm almost finished.

CHAIRMAN MELIUS: Well, you need to finish.

MS. PADILLA: -- "to hide its illegal acts and the illegal acts of its employees behind the sovereign immunity of a department of the federal government, DOE. Some DOE employees likewise become a law unto themselves and attempted to immunize themselves from prosecution by hiding behind the sovereign immunity of the U.S. government."

CHAIRMAN MELIUS: Thank you for your comments.

MS. PADILLA: These are the words of the federal court concerning the management of Rocky Flats.

CHAIRMAN MELIUS: Excuse me, but I think you need to wrap up please.

MS. PADILLA: Okay. That is all that I wish to say. My name is Judy Padilla. I worked at Rocky Flats from 1983 to 2005 when it closed. And I'm a cancer survivor.

CHAIRMAN MELIUS: Okay.

MS. PADILLA: Thank you very much.

CHAIRMAN MELIUS: Thank you. Anybody else on the phone that wishes to make public comments?

(No audible response)

CHAIRMAN MELIUS: If not then we'll wrap up and adjourn the meeting. Thank you all.

(Whereupon, the above-entitled matter went off the record at 5:55 p.m.)