THE U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
PUBLIC HEALTH SERVICE
CENTERS FOR DISEASE CONTROL AND PREVENTION
NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH

convenes the

MEETING THREE

SUBCOMMITTEE FOR DOSE RECONSTRUCTION AND SITE PROFILE REVIEWS

The verbatim transcript of the Subcommittee for Dose Reconstruction and Site Profile Reviews, Meeting 3, held at the Adam’s Mark, St. Louis, Missouri, on February 7, 2005.

C O N T E N T S

February 7, 2005

TRANSCRIPT LEGEND

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Senior Science Advisor
National Institute for Occupational Safety and Health
Centers for Disease Control and Prevention
Washington, DC

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Occupational and Environmental Health
Wisconsin Division of Public Health
Madison, Wisconsin

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The Vanderbilt Center for Occupational and Environmental Medicine
Professor of Medicine
Nashville, Tennessee

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Los Alamos National Laboratory
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Local 5-4200
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Creative Pollution Solutions, Inc.
Salem, New Hampshire

MELIUS, James Malcom, M.D., Ph.D.
Director
New York State Laborers' Health and Safety Trust Fund
Albany, New York

MUNN, Wanda I.
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Richland, Washington

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STEVEN RAY GREEN, Certified Merit Court Reporter

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ALEXANDER, TERRY
ALLEN, GEORGE
AMANN, DEBORAH
ANBLE, JOHN, KTVI
ARRO, MICHAEL R.
BAFARO, MARILYN, NIOSH
BASCHERT, BETTY J.
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BELL, R. THOMAS, SC&A
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DOLAN, WILLIAM E.
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SPICKETT, EVELYN
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STEGER, RONI
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P R O C E E D I N G S

(8:40 a.m.)

DR. ZIEMER: Good morning, everyone. I'm going to call the meeting to order. This is the Subcommittee for Dose Reconstruction and Site Profile Reviews. This is not the full Board meeting, even though a good fraction of the Advisory Board will be in attendance at this session. But this is a session of the Subcommittee for Dose Reconstruction and Site Profile Reviews.

This particular subcommittee will be meeting most of the morning to cover several items which are on the agenda.

I have a few announcements and pieces of information before we get into the agenda. First of all, we'd like to ask all attendees who are here in the room, if you have cell phones or beepers we ask that you turn them off while you're in the room. If you need to make calls and so on, please do that in the hall, but we've had problems in the past with cell phones and beepers interfering with the meeting and the sound system. So if you would, please do that.

We apologize for the late start. We ourselves had problems getting all the sound up and running here this morning, as well.

The sessions throughout the meeting will be taped by Louise McKeel, who's with the Village Image, and they will be taping throughout, so -- and just so you're aware of the fact that that is occurring.

Later in the morning we expect a visit from Senator Kit Bond, and at the point at which Senator Bond arrives, we will interrupt wherever we are on the agenda in order to accommodate his schedule. He does wish to address the Board or those that are here at that time, and we'll try to accommodate that, and he will bring some greetings and some related remarks relative to this week's agenda.

I'd like to ask everyone who is here, Board members, visitors, to be sure to register your attendance on the registration book that is out in the hallway.

Also on the rear table you will find many handouts, including the agenda and other support and supplementary materials relating to this meeting and other Board-related

information.
I'm going to introduce Dr. Lew Wade, who is serving as our Executive Secretary and Designated Federal Official today. Lew, do you have a few remarks as we get under way?
DR. WADE: Yes, just very briefly. I'll make a more formal welcome to the full committee when it arrives, but I think I needed to explain why I'm in the chair and will remain in the chair throughout not only the subcommittee meeting but the full Board meeting as both Executive Secretary and Designated Federal Official.
As you know, Larry Elliott has ably served in those roles at previous Board meetings, but as we looked at this agenda and the likely agenda of subsequent Board meetings, there are a number of items that will require Larry to interact with this Board as the program head of OCAS within NIOSH. And therefore, to free Larry up to do that, and also to avoid any appearance of a conflict between his role as the head of OCAS, as well as his role on this Board, I'll sit in the chair.
I would start by apologizing to the Board that I don't have the depth of experience that Larry

does, and I will unashamedly seek advice and guidance as it's needed to serve the Board. But if you have any issues or needs, please let me know and I consider it at this late stage in my career really an honor to be able to sit in this chair.

DR. ZIEMER: Okay. Thank you very much, Lew, for those remarks.

REVIEW AND APPROVAL OF DRAFT MINUTES, MEETING 2

Subcommittee members, you have in your folder, in the binder, the minutes of the subcommittee meeting that was held in December at Livermore. I'd like to call attention to those minutes and ask if anyone has any corrections or additions to those minutes.

(No responses)

DR. ZIEMER: If not, I'll entertain a motion to approve the minutes.

DR. DEHART: So moved.

DR. ZIEMER: It's been moved -- and seconded? Has it been seconded?

MR. GRIFFON: Second.

DR. ZIEMER: Seconded, thank you. All in favor of approving the summary minutes of the December subcommittee meeting, please say aye.

(Affirmative responses)

DR. ZIEMER: And any opposed?

(No responses)

DR. ZIEMER: And the motion carries and those minutes then are approved.

SUBCOMMITTEE DISCUSSION_-- CASE SAMPLING MATRIX

Following our meeting in Livermore we asked a working group to work with our contractor and with NIOSH on developing the responses to both the first set of 20 dose reconstruction reviews, as well as the site profile review that had been completed. In that connection, that workgroup had developed a matrix for assisting us in the selection of cases as we go forward in selecting cases -- dose reconstruction cases for audit. And Mark has kind of had the lead on developing that matrix. I'm going to call on Mark -- Mark, are we ready to present that? I don't know if we have the handouts yet or --

UNIDENTIFIED: (Unintelligible)

DR. ZIEMER: Okay. Well, one thing you do have at your -- at your desk is the summary materials, and actually NIOSH provided this, as they committed to last time. And that gives

breakdowns of the cases that we have looked at, as well as the numbers of cases from the various sites and the categorization of cases. If you look at this, first of all by location, by cancer type, by year of first employment, by number of working years, total cases that have been processed and the projected number of cases from the various sites and so on. So this will help us as we select future cases to make sure that we are getting representations by site, by cancer type, by other parameters that we may wish to emphasize.

Are there any questions on the material that's been provided for us here, just -- as you look down through that, and you may not have had -- this was here at your place so you haven't had a chance to look at it in advance, but for example, if you looked at the first page there you see the Savannah River Site, the total number of cases received and you see the number of cases that we have selected already and so on, so that's how that is broken down.

The second page you see the number of cancer types and the various percentages of each in the -- in the -- from the various sites and the

numbers that we have selected already and so on.

DR. DEHART: I think the other construct is that if you assume a two-and-a-half percent sampling rate, that's -- then the projected cases would be the number of cases --

DR. ZIEMER: Oh, right.

DR. DEHART: -- that needs to be --

DR. ZIEMER: That column just to the left of the number of cases that we've already selected, the projected cases would represent the two-and-a-half percent of the total cases that would eventually be received, so that gives you some -- you can look and see where are we relative to what we may finally wish to end up with.

Any questions on that? Yes, Roy.

DR. DEHART: If a case goes to appeal, which has happened with our group, but is that case then removed from the total percentage that we see --

DR. ZIEMER: The answer is yes. In fact, there were two cases in the last batch of 20 for which that occurred, and those were removed then immediately. So actually we have before

us or in process now and SC&A is reviewing now 18 rather than 20 cases because of that very fact. And I believe that will always be the case, if -- if it's not really final, then it's not eligible for the audit at that point. Mark.

MR. GRIFFON: The -- the other thing in this -- in the handout is that there's a second pool, pool two I think it's called, that shows those same four tables, but on the available cases at this point, so it kind of gives us the numbers based on the available cases, if I'm interpreting this correctly. So that's also, you know, --

DR. ZIEMER: Okay --

MR. GRIFFON: -- consideration --

DR. ZIEMER: -- you're on -- you're on page 5 of the packet?

MR. GRIFFON: Right.

DR. ZIEMER: And what was --

MR. GRIFFON: Well, I mean it -- it's -- that's the cases that have final determinations --

DR. ZIEMER: Oh, yes, okay.

MR. GRIFFON: -- at this point, yeah.

DR. ZIEMER: Right.

MR. GRIFFON: So we -- you know, we don't have that overall pool available yet to sample from. That's -- that's the point they're making here.
DR. WADE: Pool one is all cases received and pool two, cases that have final determination.
DR. ZIEMER: Right.
MR. GRIFFON: I just wanted to point that out.
DR. ZIEMER: Right. And it's pool two that we actually are drawing from. Right. But keeping in mind the long-term pool that hopefully will eventually be completed.
MR. GRIFFON: Right, right. There -- there's a couple of thing-- one thing that I think we should probably include, at least for the pool two cases, is the approved or denied, or -- or -- I think we were actually going to maybe break down the percentages on POC, and I forget how we broke those down, Paul, in our criteria, but we talked about --
DR. ZIEMER: Well, we did ask --
MR. GRIFFON: -- less than 40, 40 to 50 --
DR. ZIEMER: We did ask in the last --
MR. GRIFFON: Yeah.
DR. ZIEMER: -- selection that they indicate probability of causation --

MR. GRIFFON: Right.
DR. ZIEMER: -- in the final determinations, and I'm not seeing that here in the packet. Is that --
MR. GRIFFON: No, what -- previously when they've pulled 20 random cases for us, they've -- they've put that POC on there, and I think it'd be good to also --
DR. ZIEMER: Right, let me --
MR. GRIFFON: -- have a track to --
DR. ZIEMER: -- ask any of the staff, is that -- is that a parameter that can easily show up on this -- Stu Hinnefeld, we're just asking whether or not probability of causation is a sort that we can also see in the future on these or --
MR. HINNEFELD: In terms of the count, as well?
DR. ZIEMER: Yes, right.
MR. HINNEFELD: Yes.
DR. ZIEMER: Well, it probably can, because I think they indicated that information when they gave us the cases.
MR. HINNEFELD: Yes. Yes, we can put that on. In fact, I can have it for you in a little while. It'll take me just a minute.

DR. ZIEMER: Yeah.
DR. WADE: Is it the subcommittee's desire to see that information for all cases that have had a final determination made?
DR. ZIEMER: I believe that was the -- kind of the consensus last time, that we would like to --
MR. HINNEFELD: Well, page 8 has the -- has the numbers of the ones that are final determination and how they broke out in terms of greater than 50 and less than 50 in terms of percentages. That's on page 8 --
DR. ZIEMER: Right --
MR. HINNEFELD: -- but what we don't have is the count of the 38 that have been selected.
DR. ZIEMER: Right, and the other part of that was -- there was some desire to maybe focus on cases that were somewhat in the middle of the range, below the 50 but -- you know, the 40 to 50 particularly we were somewhat interested in focusing on --
MR. HINNEFELD: Okay.
DR. ZIEMER: -- if it's -- I know it's easy to sort on the yes and no, 50 and above and below 50. But for example, can we get one to 40 -- I

forget how we --

MR. GRIFFON: Yeah, I think we talked about zero to 40, 40 to --

DR. ZIEMER: Zero to 40 and then 40 to 49.999 and then --

MR. HINNEFELD: And 50 and above, do those three?

DR. ZIEMER: Yeah.

MR. HINNEFELD: I think I can probably have that before the day is over.

DR. ZIEMER: That would be helpful, too.

MR. HINNEFELD: Okay.

DR. ZIEMER: Thank you.

DR. WADE: And we would have that for cancer type, as well as for site? That would be your desire?

MR. GRIFFON: That would just be for cases. Right? I don't know if we need that by cancer type.

DR. WADE: So you would like just one number?

MS. MUNN: Yeah, I think that's what we need.

DR. ZIEMER: I don't think we'd need it by cancer type at this point. We start getting more detailed than we can deal with.

DR. WADE: But you would like it for site? I

just want to be sure that the --

DR. ZIEMER: Oh, I -- I --

MR. GRIFFON: No, I just want it by case --

DR. ZIEMER: -- no --

MR. GRIFFON: -- just for case.

DR. WADE: By case, so one aggregate.

DR. ZIEMER: Right, right, so we know sort of what fraction of these are -- have we looked at that are way low, way high and then the middle. Okay, other comments on -- this is very helpful and we thank the staff for providing this information.

MR. GRIFFON: I think one thing that we had discussed in our procedure, and I -- procedure on case selection, was these other parameters that we may want to track that aren't easily obtainable from the database. One that comes to mind quickly when I'm looking at my old spreadsheet is the job type, and I know that's a difficult one to wrap our hands around maybe 'cause job titles -- they might have four or five titles and -- but I think it may be important if we want to at least be able to look -- say we looked at some construction workers, some production workers, some

maintenance type -- you know.

DR. ZIEMER: Yeah. And you may recall that we -- we know that we can't sort against job type a priori 'cause it's not a -- one of the sort able parameters, but after the fact -- and I guess we may need to track that or have SC&A help us track that. That -- Hans, I -- is John here this morning?

DR. BEHLING: No, he's not.

DR. ZIEMER: This may be something we wish to talk with SC&A, but one of the tasks is to track the cases, and it may be that that is a track able item because there is a job description, once we get the case and review it. And we can talk with SC&A. That may be a tracking effort that we may need to do ourselves at that point since it's not in the original sort able database.

Are we okay on this matrix then? Anything else on the matrix itself that we need to discuss? Mark.

MR. GRIFFON: Just one final item that I've raised before, and I'm not sure, I -- I was looking to NIOSH or ORAU for guidance on this, is the last grouping there, sample of industry

groups, that includes a lot of the AWEs, and I'm -- I've -- I have proposed before that it might make sense to group -- to have sub groupings, you know, like -- I know that there's a lot of uranium industries in that group, so I don't know if it makes sense to break that out in any way or just leave them as all -- as one larger group. That's -- that's the question, and maybe NI-- I thought NIOSH might have a sense of that.

DR. ZIEMER: What -- Stu or Jim -- Stu, what is in the group of 83 -- oh, well, 3314 called sample industry groups?

MR. HINNEFELD: That's essentially all others at this point. Since we didn't know exactly what was in there to start, we just put all others in that category. So -- now in your e-mail you suggested some possible things, like perhaps uranium-only AWEs and -- and some of those, and we've not had any additional internal discussion about, you know, kinds of things to put in there, but we can certainly, you know, welcome your suggestions. The database is fairly query able and so we can probably put whatever we want there.

MR. GRIFFON: Maybe my -- you know, this is not a question to answer right now, but maybe if -- in the future we could get sort of some sense -- 'cause I know there's a couple of procedures that say they're applicable to several different AWE sites, so obviously they're grouping some -- they're -- they're going through this thought process of which ones belong -- which ones are sort of similar and which ones are not --

DR. ZIEMER: Now it might -- might be helpful then to -- if we actually had a sort of who's in that group and -- and how would you categorize them.

MR. HINNEFELD: Okay.

MR. GRIFFON: For future -- yeah.

DR. ZIEMER: Would -- would that be reasonable, just if -- if that's something you can sort for easily and we could take a look at it and see if that's...

MR. HINNEFELD: Okay. Yeah, we can provide that to the Board between now and the next meeting? How would we do that?

DR. ZIEMER: I think in the next meeting is -- we don't need it now, do we?

MR. GRIFFON: I don't think.
DR. ZIEMER: This is, again, looking ahead as how this may be further of help to us.
MR. HINNEFELD: Okay.
DR. ZIEMER: Thank you.
DR. WADE: So we'll leave to the NIOSH staff the decision as to how to subdivide that sample and they'll bring that to you --
DR. ZIEMER: Yeah, what categories would make sense, yeah. Wanda Munn?
MS. MUNN: With respect to categories, I guess I feel that the Board perhaps should give some direction in that regard. Are we looking for sites broken out or are we looking for what you've just mentioned, Mark, categories of employment more than anything else, operations, maintenance, construction, clerical, major -- that was my thinking when I looked at that number, rather than by site, because --
DR. ZIEMER: Would it help if we knew a little more about what -- what is actually in that -- it's kind of a catch-all category.
MS. MUNN: It is.
DR. ZIEMER: Stu, give us some examples of what are in that category. I mean it's smaller

sites, is that not correct?

MR. HINNEFELD: Well, there were -- there are some 300 covered facilities, so it's the combination of all other facilities other than the ones listed. Quite a number -- quite a large number of them are Atomic Weapons Employers, if not all. I'm not exactly sure if there -- if all the DOE sites are listed there or not, so it's -- it's the assembled mass of Atomic Weapons Employers that are covered under the program.

MS. MUNN: Which --

DR. ZIEMER: It could be a wide variety of types of activities, is that not correct?

MR. HINNEFELD: It's a -- it's a wide variety of types of activities, and there's a wide variety of durations of covered employment at the various sites. Some --

DR. ZIEMER: Some of it might be R&D, as well as --

MR. HINNEFELD: Yes, there's some R&D sites, as well.

MS. MUNN: Yeah.

DR. ZIEMER: What kind of -- Wanda, did you have in mind certain kinds of categories that

might be helpful, like --

MS. MUNN: That's what I was thinking. I was thinking if -- you mentioned R&D -- if we had research or laboratory, technical professional --

DR. ZIEMER: It may be that once we see what's in there and -- and if you can identify it in some way, many of these have a -- like a single-mission site type of thing, and if it's R&D you could identify that or --

MR. HINNEFELD: Right.

DR. ZIEMER: -- even perhaps the type of R&D.

MR. HINNEFELD: There's some categories that come to mind readily that would capture quite a few of them, and then --

DR. ZIEMER: Why don't we try that as a first step.

MR. HINNEFELD: -- beyond that, there may --

DR. ZIEMER: Would that be agreeable?

MS. MUNN: That would be my thought.

DR. ZIEMER: Yeah, okay.

MR. HINNEFELD: Okay.

DR. ZIEMER: Thank you. Anything else on the matrix? The matrix. Okay.

MR. GRIFFON: Was that someone on the phone?

MR. PRESLEY: Henry coming in.

SUBCOMMITTEE DISCUSSION -- SUMMARY OF 1ST SET OF CASE REVIEWS/PREPARE RECOMMENDATION FOR FULL BOARD

DR. ZIEMER: Are we ready then to proceed with the summary of the first set of case reviews? Okay.

We have -- we have some materials that were just distributed. We had a working group working with SC&A and with NIOSH since our last meeting, and Mark, it turned out that although Tony was the Chair of that workgroup, Tony was actually not able to be in attendance, had a conflict at the time that -- that it turned out they needed to meet, so Mark stepped in and served as Chair of that workgroup. So Mark, if you would lead us through this then.

MR. GRIFFON: Sure. Cori was nice enough to quickly print off two of these -- two documents here. The main focus I think of our discussion today should be this one-page summary, which is a methodology for categorizing and ranking DR case review findings, and our -- or at least Wanda and I and Mike Gibson discussed this in McLean, Virginia, I think -- or in Cincinnati, one or the other.

The idea -- what -- what I -- what we attempted to do, we -- we met in McLean, Virginia with SCA and NIOSH, which I should say also was a very good and encouraging process, where we went through the previously-provided DR case review reports issue by issue and did a lot of the technical back-and-forth discussions that have to occur, that worked well at that level with that number of people. And SCA has produced a -- a revised report from that which I think -- a lot of us haven't even read through that entire thing. I think we got it Friday of last week.

DR. ZIEMER: Let me interrupt for a moment. How many of you actually got the SC&A report? Some did not. I didn't get it. It's probab-- I would -- it's probably sitting in an electronic file back at Purdue over the weekend, but I've not seen it myself, but -- so not all the committee Board members -- a few have seen it, a few have not. Okay, thank you.

DR. WADE: It's a 300-page document and NIOSH has not had a chance to see it or review it at this point.

DR. ZIEMER: Okay.

MS. MUNN: It's been seen, not reviewed.
DR. ZIEMER: Okay, thank you.
MR. GRIFFON: Right.
DR. ZIEMER: Proceed.
MR. GRIFFON: So after -- you know, after the meeting in McLean, Virginia where we went through all these cases, you know, we -- we -- as a working group we -- we were tasked with the -- with the notion of coming up with some criteria on how to pull these reviews together in a summary fashion to present to the full Board. And -- and this -- this product here, this one-pager, is sort of a draft methodology of how we might go about, number one, ranking the individual findings -- and I had proposed here and one to five ranking system, with five being the most serious -- and -- and I think some of these parameters are -- or some of the bullets listed below the rankings there are important to consider. Did the -- did the finding -- could the finding have affected the dose significantly, only modestly or very -- very minor effect on the dose estimate; would it have affected the final determination of the probability of causation, would it -- was it

that significant of a -- of a finding. And the other -- the other one to think about I think when -- when trying to rank these findings is did the finding affect only that individual case; could it likely affect -- affect other cases from that site, or could it likely affect a lot of cases throughout the program. So did it have -- was it a broader finding or was it a very narrow finding. I think that's important in -- when we consider this numerical sort of ranking of the seriousness of the finding. And then I also wanted to try to categorize or group these findings, and I -- I sort of have a -- two groupings, kind of -- may be a little difficult to describe, but they probably -- at least ring true to some people. The first one in the next-to-last paragraph from the bottom of the page talks about procedural, technical, quality control or regulatory findings, so -- so taking individual findings, going through and -- and saying was this -- and understanding that there's probably a little overlap on some of these findings, that some are procedural and technical mixed, but you know, was it primarily a procedural issue, was it a -- a technical

issue, was it quality control-related, sort of -- sort of categorize them like that.

And then additionally I thought it was useful to group them by the -- sort of some of these scope of work criteria, or the way we -- we sort of structured the task order. The categories in the task order include data collection -- this is at the very bottom of the paragraph -- data collection, the interview process -- which is the CATI interview -- the internal dose, external dose, medical dose or general. And -- and I must admit when I first went through these, general -- general was the category where I put some ones where I couldn't find a category for, but -- but they do -- in some ways they are a -- a few of the ones that were identified in this first meeting seemed to -- seemed to cross the category, so there were more -- more generic findings about the DR reports themselves.

And that's -- that's sort of what we came up with. I think that -- Wanda, I don't know if you have anything to add. We -- we -- this was a -- a -- a limited group of the working group that discussed this, you know, draft.

MS. MUNN: Yes, and frankly, we haven't had a chance to rework these -- these initial comments of Mark's. Just going over them, I don't see any major difference to what we had discussed. I think you captured most of the high points that we considered appropriate for this type of review.

DR. ZIEMER: Okay. Thank you. Then we will consider this to be a recommendation to the subcommittee from the working group and as such it will constitute a formal motion. This group then can adopt this and recommend it to the full Board. It can modify it. You can discard it, do whatever you wish, but it now is before us as a formal motion.

Let me open the floor for questions or comments. Let me ask the first question.

On the rankings, Mark, the one to five ranking system, you have three bullets. What would be -- would bullet one be, for example, a five?

MR. GRIFFON: Yeah, these are -- are things to consider when -- when thinking about the seriousness of -- so -- so the first bullet actually could be a one or a five -- one through five, anywhere. It says that -- would

the finding affect only the individual claim -- in that case you'd probably lean it toward a lower -- a lower -- a less significant finding --

DR. ZIEMER: Okay, so you're not --

MR. GRIFFON: -- many claims on the site would be a -- you know, middle, and then if it affected program-wide, you might give it a higher ranking. But you also have to -- these three criteria, you sort of have to think about them all at the same time --

DR. ZIEMER: Okay.

MR. GRIFFON: -- because if it only affected one case, but it could have pushed it over the 50 percentile POC, I'd say that would be a pretty serious --

DR. ZIEMER: Right.

MR. GRIFFON: -- serious-ranked finding. Right.

DR. ZIEMER: So actually the three bullets are simply questions you ask to arrive at a score.

MR. GRIFFON: Yeah.

DR. ZIEMER: And --

MR. GRIFFON: There's no prescriptive sort of --

DR. ZIEMER: Are you suggesting that the contractor would do this initially, or that the Board would do this?

MR. GRIFFON: That -- that's open, certainly. I -- I should -- this -- this might be a -- a -- well, I don't know, you can tell me, but this -- SCA, in their report that we just received, which no one's seen -- that's the -- why I'm not sure if it's appropriate to bring it up here or not, but they have come up with a two-page matrix on -- on way -- on their own ranking system, which --

DR. ZIEMER: Somewhat like --

MR. GRIFFON: There's a lot of commonality here, but -- but they're not exactly the same, so there's some differences, so you know, I -- I think that if we -- I think if we set up a system, we could probably ask the contractor to do it, once we've agreed -- sort of meshed those two --

DR. ZIEMER: To the parameters, uh-huh.

MR. GRIFFON: -- agree upon the system, and then let the contractor do it. That would make a lot of sense, I think. Just my opinion.

DR. ZIEMER: And you would -- you would see

this as a continuum of scores from one to five, or discrete -- you know, one, two, three, four, five -- or maybe you haven't discussed that kind of detail, but how -- how much specificity to these grades would you envision?

MR. GRIFFON: I don't think I got that far, although when I did this --

DR. ZIEMER: Okay, it's more conceptual at the moment then, yeah.

MR. GRIFFON: Right, when I did -- compiled this other document here, I found myself doing -- you'll -- you'll notice on the first page of that matrix one to two, three to four --

DR. ZIEMER: Okay.

MR. GRIFFON: -- so...

DR. ZIEMER: Okay. Roy DeHart.

DR. DEHART: Would it not be best to have an experience by using this second product that has -- has been generated so that we can get a better feel of just how this page is applied and whether it makes sense before we actually act upon this?

DR. ZIEMER: Okay, good question. That's not necessarily a rhetorical question. If somebody has the response to it, they can -- Wanda Munn.

MS. MUNN: I don't have the response. I guess in terms of the three bullets and ranking, it may not be clear what the thinking was at the time that these were generated. Correct me if I'm wrong here, Mark, but I think our general thought process was is this finding of major importance to this claim only, or is it of major importance across the board, so that rather than three categories there, in my mind there were two -- whether this is a broad concern or whether it's a narrow concern. And within those two definitions, then there is the issue of whether it's -- would affect final dose reconstruction numbers or significantly affect the dose estimate, so the -- the wording of the three bullets -- I don't know, perhaps -- am I clarifying it --

MR. GRIFFON: No, that's --

MS. MUNN: -- or just muddying the water better -- more?

MR. GRIFFON: No, that's -- that's pretty accurate. That first one, I -- I guess broad and narrow really -- really defines it well. I was adding in that -- that it may be that it could affect a lot of -- a lot more cases, but

only at that individual site, not beyond into the programmatics. I was giving three -- three tiers there, but really it's broad versus narrow is a good description of that. And then the other big component is this significance of the finding on the final dose, so that -- those are -- that boils it down. And maybe we -- we can certainly work with this wording. I mean that -- you know.

DR. ZIEMER: Okay. Other comments?

MR. GRIFFON: I can respond to Roy's idea. I mean I think it is worthwhile. The only thing about going through this other matrix here that I've come up with is that I generated this while SCA was generating their final report, and then I tried to -- last night, mostly -- compare the two documents and edit as necessary because I think it -- at the meeting in McLean, some findings were -- some findings basic-- basically were -- may have been dropped as a result of that meeting, once it -- once they got clarif-- once SCA got clarification from NIOSH, I think there were some that were dropped. It was a misunderstanding on the auditor's part. Others, NIOSH had agree--

agreed with the finding. And then there was this third category which I tried to capture in -- in the NIOSH response section of this matrix, and the third category was some -- required further investigation or follow-up, so -- so this is pretty draft -- you know, if we wanted to look at it in terms of how this methodology worked, that's one thing, but it's -- it's -- understand it's very draft and may not even represent SCA's final product. That's what I fear, you know, as far as...

DR. ZIEMER: Okay. Mark, could you also put this in context with the concept of findings versus observations that SC&A used in their first report. Is this applying only to findings, as opposed to observations?

MR. GRIFFON: I didn't think -- and SCA --

DR. ZIEMER: I think -- I think those were the --

MR. GRIFFON: -- SCA --

DR. ZIEMER: -- and double-check with Hans, perhaps. We had findings, observations and then there was maybe a third category, which I can't remember -- and he can't remember either, maybe.

DR. BEHLING: I'm not sure I really fully comprehend the difference a findings observations because in many instance we were trying to tone down the rhetoric and use terminology that would be acceptable, such as "issues of concern" as opposed to the use of "errors" or things like that. So when we talked about findings and observations, I'm not sure we really differentiate between those two --

DR. ZIEMER: Yeah, and actually now that I think about it, I'm also mixing site profile reviews with dose reconstruction reviews. I think in the site profile reviews you actually had the findings and observations as a -- as specific categories that you folks made.

DR. BEHLING: I think we used them interchangeably. I don't think there was any attempt to differentiate the findings from an observation.

MR. GRIFFON: My sense in this report -- and again, I've -- I've only -- did a cursory review of the final one, but my sense is that they didn't really distinguish, so these findings -- I didn't really want to use the

terminology of findings and observations. Rather I thought if people wanted to see the significance of a finding, they should look at the ranking, so the ranking sort of says is it a serious -- is it a serious matter or is it a less serious matter instead of -- 'cause observation and finding's pretty -- pretty vague terminology, too.

DR. ZIEMER: Uh-huh.

MR. GRIFFON: So that -- that's the way, at least in this method, that we're proposing it.

DR. ZIEMER: And then also help us think about sort of the -- the cross-walking between the ranking of the findings and the categorization. For example, is a procedural five ranking versus a quality control five ranking -- does one -- is there any different level of seriousness or is a five a five?

MS. MUNN: A five's a five, yeah.

MR. GRIFFON: I think a five's a five.

DR. ZIEMER: A five's a five.

MS. MUNN: Yeah.

DR. ZIEMER: That makes sense.

MS. MUNN: That's big stuff.

DR. ZIEMER: Yeah. You have a comment, Wanda?

MS. MUNN: Yes, I do, with respect to the issue of findings and observations. If there's not a clear delineation there, there may be some significant confusion to people who are accustomed to seeing very clear differentiation. To me, a finding is something which is of significant enough importance that some decision must be made on it. An observation is just exactly that, it is calling to your attention something which might or might not cause other issues to raise in people's minds. And the third category -- in my parlance, which is not widespread, I'm sure -- is a comment, which is simply an acknowledgement that something was noted or -- or something was observed that wasn't worthy of boosting it up to a significant level. If we -- if we use findings and observations interchangeably, my perception is that that will be confusing, both to the casual reader and to some researchers.

DR. ZIEMER: Uh-huh. My -- my impression was similar, that both the observations and the comments were items that the audit may wish to call attention to, but it had a priori very

little significance in the scheme of things, but may be something that ought to be done differently, that it didn't affect outcomes but it was something perhaps that some attention has to be given to. If it's in the finding category, it automatically takes on a -- an importance, and then --

MS. MUNN: Yes.

DR. ZIEMER: -- the ranking would tell us --

MS. MUNN: Yes.

DR. ZIEMER: -- is that of narrow importance or widespread --

MS. MUNN: Yes.

DR. ZIEMER: -- importance in the scheme of things and --

MS. MUNN: Exactly.

DR. ZIEMER: -- would -- but it may be helpful to -- if we do go forward using terms such as findings versus observations and comments, that there be a clear distinction between those. John Mauro has walked into the room and I had a comment, John, and I think this was -- probably dealt more with the site profile reviews, but you -- you did distinguish between a finding and an observation, did you not, in the site

profile reviews, as I recall?

DR. MAURO: (Off microphone) Yes, we did.

DR. ZIEMER: Yes, and the finding was inherently of more serious nature than an observation.

DR. MAURO: (Off microphone) Yes, in effect, the --

DR. ZIEMER: You may need -- does he need --

DR. WADE: Would you get to the microphone, please?

DR. ZIEMER: This is John Mauro from SC&A, the contractor.

DR. MAURO: The way I like to communicate it, to sort of bring it down to the simplest -- a finding is we -- we believe we've found a -- a problem, something that needs to be fixed. An observation is -- you know, there's an issue here that you may want to look into the literature a little further, to get further clarification. So in other words, it's not that there's necessarily something that's wrong, but it's something -- something that is probably worthy of additional consideration. So there's a pretty clear -- we're trying to make a clear boundary between the two.

DR. ZIEMER: Right. And that was more focused on the site profile reviews, but it may be that a similar nomenclature could be used in the dose reconstruction reviews, as well.

DR. MAURO: That's true, although our -- although I'd like to ask Hans to -- because we have come up with a -- a checklist, as you may be aware, where we've taken a different tact.

DR. ZIEMER: Right, and unfortunately, not all the Board members have had a chance to see that yet. Mark referred to the fact that there is a -- a matrix now that you are using, and it somewhat parallels these ideas and we may need to merge them conceptually, as well.

DR. BEHLING: If I may, I would just like to make a comment. When we talk about whether something is significant and whether or not that significance spreads to other issues, sometimes that distinction is very, very difficult to make. And I guess the best way to illustrate this to give you an example, and I'm sure that, for instance, Mark will agree because he's been party to some of the discussions we've had. When we, for instance, have an individual who has had an exposure that

is part of -- in the record; in other words, we have TLD data or we have film badge dosimetry data. And in certain number of cases that we've reviewed to date, the individual dose reconstructioner failed to actually introduce the issue of uncertainty for that dose. And I won't go into the details to what causes here, but again we want to say is this a significant issue? Well, it's insignificant if the dose of record -- let's say for that individual, for the years that he was employed is a modest let's say 200 millirem, the uncertainty of an -- the exclusion of uncertainty at most, even if he doubled it, would be 200 millirem. But we've had other individuals whose dose of record was something like 30 rem. Now the absence of including the uncertainty now becomes a significant issue. So how do you classify it? It's relative to the issue of what was that individual's exposure. So the absence of uncertainty is not something you can categorize without defining what the actual dose was for which the uncertainty was not included.

MR. GRIFFON: And that's -- that's why, you

know, you -- we have the--

DR. ZIEMER: Right.

MR. GRIFFON: -- not only the effect on the dose, but also the broad versus narrow nature of the finding and --

DR. ZIEMER: Right, and would that particular situation affect other cases, and you've made an example here where yes, it might not affect this case, but broadly could affect many other cases, so that would be an example -- and in which case you would give it a higher ranking as a finding. Uh-huh.

Did you have a comment, Lew? No. Okay. Other comments, subcommittee?

It may be that you will wish to adopt -- I'm sorry?

MR. PRESLEY: Henry just came --

DR. ZIEMER: Oh, Henry, I'm sorry. Okay, welcome. Henry Anderson is on the phone. He's somewhere in the far reaches of the world.

Henry, where are you this morning?

DR. ANDERSON: (Via telephone) I'm in Anchorage, Alaska.

DR. ZIEMER: Anchorage, Alaska.

DR. ANDERSON: (Unintelligible)

DR. ZIEMER: Okay. His question is would you see this fitting into Table E.

DR. ANDERSON: (Unintelligible)

DR. ZIEMER: Okay. Is it -- where -- I'm not sure if we all have access to that table, Henry. Is that the table in the new SC&A report?

DR. ANDERSON: (Unintelligible)

DR. ZIEMER: Yeah. Unfortunately not all the Board members have gotten that report yet, so --

DR. ANDERSON: (Unintelligible)

DR. ZIEMER: Right, as -- but not -- not all of us have gotten that report yet.

DR. ANDERSON: Oh, okay.

DR. ZIEMER: Yeah, so --

MR. GRIFFON: Kind of generally, Henry --

DR. ZIEMER: Yeah, here's Mark.

MR. GRIFFON: Generally I thought that there -- we have overlap in the approaches --

DR. ANDERSON: Yeah, you had a little more -- you had a few more elements, I think, that you added, as in broadly impacting other cases and things like that, but I...

MR. GRIFFON: Right, right.

DR. ZIEMER: Okay, thank you. Conceptually we would have to somehow merge these concepts, I would -- I would guess.

What I'm wondering is if the subcommittee would wish to recommend that the Board adopt this methodology in a general sense, with -- with the details of the scoring and so on to be worked out. This is -- at this point is more of a conceptual piece than it is a -- a detail on how you would actually do it.

Would that be a fair characterization, Mark, Wanda?

MS. MUNN: Yes, I believe that it would be. I would suggest that the motion be that we accept this concept in principle, the details to be worked out.

DR. ZIEMER: Okay. We can consider that kind of a friendly amendment to the original motion to adopt the document, would be to adopt it as a -- say the words again, if you're --

MS. MUNN: As a concept.

DR. ZIEMER: As a concept.

MS. MUNN: The details --

DR. ZIEMER: With the details to be worked out.

MS. MUNN: -- to be worked out in the short

term.

DR. ZIEMER: Uh-huh. Is that a -- that's agreeable as the true nature of the motion that's before us. Mark, before we vote do we need to look at your supplementary material at all? Oh, this --

MR. GRIFFON: Well, I spent a lot of time -- no.

DR. ZIEMER: You'd really like to work on -- look at it then. The supplementary material really takes the, quote, findings from the first 20 cases -- right? -- and tries to actually categorize them, according to this concept.

MR. GRIFFON: Right, that's -- that's right. And there -- there --

DR. ZIEMER: And tell us -- on the table here, for example, the -- the reference numbers on the left --

MR. GRIFFON: Yeah, on the left-hand side --

DR. ZIEMER: -- refer to --

MR. GRIFFON: Reference numbers refer to the -- the document we worked from in McLean, Virginia had finding numbers or issue numbers for each case, so I took the case number and issue

number, so it's case number one, issue one is 1.1, case one, issue two, so forth, down the line.

DR. ZIEMER: Okay.

MR. GRIFFON: And then I grouped them -- I sorted these by internal dose being the first several pages here, and then you'll see other groupings.

DR. ZIEMER: So you've done the categorization, such as you talked about in your -- your --

MR. GRIFFON: Right.

DR. ZIEMER: -- bottom section of your --

MR. GRIFFON: At least for most --

DR. ZIEMER: -- categorizing paper.

MR. GRIFFON: At least for most of them there's a ranking --

DR. ZIEMER: So you've got them categorized by internal dose, external dose, external medical, interview and data collection. Correct?

MR. GRIFFON: And then general at the last.

DR. ZIEMER: And some general.

MR. GRIFFON: Right.

DR. ZIEMER: And then in each case you've summarized the findings, you've summarized NIOSH's response, you've --

MR. GRIFFON: And in some cases, either parenthetically or -- or underlined, I -- I noted that there -- at least from my notes, there was an agreement from either NIOSH or SCA to -- you know, more investigation was required or several of them NIOSH and SCA agreed that -- that these comments were better resolved in the site profile reviews which were ongoing. They were slightly broader issue, but were also being discussed in the site profile reviews, so they sort of were left to that discussion. So I tried to note -- note sort of what the action was when I -- when I could remember -- when my notes were good enough to tell me.

And the last thing I'll say is that this is the matrix that -- that their -- SC&A report has in it, and this matrix -- I tried to go through issue by issue on my sheet and match up where they had a -- an item checked off on their matrix to match with the finding, and for the most part I was successful. There were some where I questioned what -- what -- how to match them, so --

DR. ZIEMER: Yeah. Let me insert here, let me ask this question. Is the SCA report available

today to the public? I mean is it -- is it here?

UNIDENTIFIED: (Off microphone) Yes.

DR. ZIEMER: And it's on the back table?

UNIDENTIFIED: (Off microphone) (Unintelligible)

DR. ZIEMER: Okay. So -- and it's a -- it's a lengthy report. How many thousand copies of this 300-page report have we --

UNIDENTIFIED: (Off microphone) (Unintelligible)

DR. ZIEMER: We have enough. Okay. So that report is available, and Board members who did not get a chance to get that report before you came, please pick one up. It seems to me it's going to make sense for us to lay this side by side before our Board meeting and look at these two --

MR. GRIFFON: And I would just recom--

DR. ZIEMER: -- and see how they track.

MR. GRIFFON: I would recommend, too -- it's useful to lay --

DR. ZIEMER: So Mark, you can --

MR. GRIFFON: -- methodology next to this --

DR. ZIEMER: Yeah.

MR. GRIFFON: -- matrix.
DR. ZIEMER: Yeah, what you're referring to -- and I want to make sure members of the public have this -- is what, a summary in the front of the SC&A report?
MR. GRIFFON: It's a summary that they have in front, and then in the front of each case, also.
DR. ZIEMER: Okay.
MR. GRIFFON: Throughout the document.
DR. ZIEMER: And there's an overall -- overall summary, as well? The document you just referred to, give us an identification table, for the record.
MR. GRIFFON: All I have as a reference is Table 2, case review checklist. Is that --
DR. ZIEMER: Table 2, case review checklist.
MR. GRIFFON: Wait, it might be...
DR. ZIEMER: Yes?
MS. BEHLING: My name is Kathy Behling. Just to clarify, we put an executive summary into the report, and that table is ES-1, in which we summarized -- we -- all of the 15 DOE facility cases --
DR. ZIEMER: Okay.

MS. BEHLING: -- that we reviewed, and --
DR. ZIEMER: Thank you.
MS. BEHLING: -- and within the -- excuse me, I'm sorry -- within the report, in each individual tab, there's also a table for that particular -- for the 15 DOE facilities.
DR. ZIEMER: Okay. Excellent, thank you. So that will be a way of kind of looking at this matrix that Mark has here and kind of laying it side by side to get a feel for that.
Yes, Stu Hinnefeld.
MR. HINNEFELD: Yeah, I just wanted to make sure everybody understands, we're seeing the matrix that Mark prepared for the first time today, and I haven't seen anything in it I disagree with or I think mischaracterizes the -- the discussion in McLean, but we would want to be able to make sure that, you know, we see that and -- and it has captured what we recall having been said. I haven't seen anything yet that doesn't, but I just thought -- we haven't seen it yet and everybody should know that.
DR. ZIEMER: Right, nor have we.
MR. HINNEFELD: Right.
MR. GRIFFON: I agree. In fact, there's

several of them which I -- I was unclear whether SC&A had agreed to drop the finding or not, so I think it's definitely --

MR. HINNEFELD: Right. I'm sure that's the case. Right.

DR. ZIEMER: Right. And let's -- let's understand that Mark's -- Mark's sheet here is, again, working the concept at this point 'cause we haven't had a chance to really see what the final report from SC&A -- well, some have but most haven't -- yeah, and Hans, please.

DR. BEHLING: Yeah. I just want to clarify a point. I think there was some misunderstanding that Cori had to -- stated that the report was available on the back table. It is not. The report in question was made available, has already been acknowledged, to each of the Board members by e-mail, electronically. At this point I'm also expecting three copies, hard copies, to be sent to us here at the hotel sometime today for distribution, just the three copies, limited distribution. And of course each and every Board member will also receive a hard copy that will be mailed sometime probably today and when you get back to your office you

will find -- find a hard copy of that report.

DR. ZIEMER: Okay.

DR. BEHLING: So right now there is no hard copy as we speak.

DR. ZIEMER: Okay.

DR. BEHLING: Only what we will expect to get sometime -- by FedEx today for distribution.

DR. ZIEMER: And I believe as soon as available, that report will also be made available on the web site. Is that not correct?

UNIDENTIFIED: (Off microphone) I believe so.

DR. ZIEMER: Yes. We want to make --

UNIDENTIFIED: (Off microphone) (Unintelligible)

DR. WADE: It has to be Privacy Act reviewed.

DR. ZIEMER: Yes, after a Privacy Act --

DR. WADE: You are having a discussion of this generic methodology, so I think your materials, and then possibly I could work with SC&A and see that some summary of their generic material could also be made available to the Board for consideration tomorrow, short of the full report. So I would try and work with you, John, to see that we could get that material.

But the -- the full report has not been looked at from a Privacy Act point of view.

DR. ZIEMER: So that needs to occur before it's widely distributed. Okay. Yes, Shelby.

MR. HALLMARK: Dr. Ziemer, Shelby Hallmark, Labor. Just in looking at this report for the first time this morning, and in light of the discussion that was held earlier about the ranking system and the fact that the rank that's being applied in this report applies at some points to the individual reconstruction itself and at other points to the methodological, broad scale, a suggestion from our vantage on this would be that maybe there's a need for two ranks, one applicable to the individual case and another applicable to the broad impact. And obviously some method-- some of the items that are shows as fours here go across all the different dose reconstruction reports and are in fact important methodologically, but with respect to the individual case they may not have an impact as far as outcomes and so on, and so I think it would be more transparent to the public if you had two scales.

DR. ZIEMER: Yeah. The comment then would be to -- to break those two apart, and that's certainly a possibility, that you have a -- a ranking for the case and a separate ranking for the impact overall as a broad finding, and it may very well be that making that separation will be helpful, as well. Thank you for that comment. Wanda?

MS. MUNN: And Shelby's comment is well-accepted. It would be, I think, simpler to see.

I wanted to express real appreciation to Mark for having put together this summary, which is very much in line with what I believe the working group was thinking. I personally made a weak effort to try to do a similar kind of thing, and found my notes from the McLean meeting seriously lacking and therefore gave up in frustration. So thank you very much, Mark.

I have one question. I notice that in some of the cases you had underscored the response -- the NIOSH response comments that you had -- that they were going to resolve the general issue with NCA (sic) and with others that was not underscored. Was there a reason for the

underscoring or is that just clerical?

MR. GRIFFON: Probably cl-- probably late at night and didn't -- I wasn't consistent with that application, probably.

MS. MUNN: Okay.

MR. GRIFFON: Yeah, I have to go through that again, but --

MS. MUNN: Thanks.

DR. ZIEMER: So the underscoring doesn't have a particular --

MR. GRIFFON: Usually I tried to capture when there was an outstanding issue for either SCA to follow up on or NIOSH, but I -- I agree, I probably have to go back through that --

MS. MUNN: Okay.

MR. GRIFFON: -- and edit.

DR. ZIEMER: It may not -- it may not have been consistent at this point? Thank you. Further discussion? We're still on a motion as to adopting this idea or this concept. Yes, Roy.

DR. DEHART: Just a point of clarification on -- on the summary sheets. Were you intending to leave out the ranking on pages 2 and 3?

DR. ZIEMER: Yeah, I think some of these the --

the issue disappeared because it was resolved between the -- is that correct?

MR. GRIFFON: Yeah, that's --

DR. ZIEMER: 'Cause that's what --

MR. GRIFFON: Page 2 and 3 are actually a specific site, and the -- these weren't discussed in McLean, Virginia because they were under discussion with the site profile discussions, so I didn't really have a sense of the ranking until I -- I think we hear from those discussions, so they were intentionally left blank --

DR. ZIEMER: Oh.

MR. GRIFFON: -- in that case, yeah.

DR. ZIEMER: Okay. So not necessarily resolved at that time --

MR. GRIFFON: Right.

DR. ZIEMER: -- but under discussion.

MR. GRIFFON: Right, they -- they weren't discussed at that McLean meeting. They were held for further discussions on the site profile task.

DR. ZIEMER: Thank you. Are you ready to vote on the motion? It appears that we're ready to vote on the motion.

All in favor of accepting, say aye?

(Affirmative responses)

DR. ZIEMER: Those opposed, say no?

(No responses)

DR. ZIEMER: Any abstentions?

(No responses)

DR. ZIEMER: Thank you. The motion carries. Thank you, Wanda. Thank you, Mark, for excellent work on this. Let's see, Mike was also involved, and thank you, Mike, appreciate that.

DR. WADE: I'd certainly like to add my thanks to all three, particularly to Mark. I think this is a tremendous contribution. Thank you very much.

DR. ZIEMER: The agenda indicated that we would prepare a recommendation to the Board on the summary of the first set of case reviews. But in essence, what -- what we've done here is adopted a kind of methodology for going forward. We have -- we now have the revised report from our contractor. That is, it in essence is in our hands or close to being in our hands right now. But is, again, a rather lengthy report and needs to be looked at in

light of this approach so that -- it appears to the Chair that we will not be in a position of actually recommending an action on the report itself from SC&A. Is that the sense of the subcommittee at this point, that we're -- we're not at a position of making a recommendation on the -- on an action on that first set of 20. Nonetheless, this has been good progress because we are developing a methodology which will be useful and helpful in all succeeding audits and therefore this will help streamline the process for the future. So even though it seems a little slow for the first 20, but we're learning a very good process. I think it's been helpful to the Board, helpful to the auditors, as well as to NIOSH. So certainly the sense of the Chair that that's where we are on this and that we have reached close to a closure on the methodology for how we handle these audits as we go forward.

We're going to do the selection of the next set of cases, but I think it would be appropriate to have a brief break here before we proceed with that, so I'm going to declare a 15-minute recess and then we'll reconvene to handle the

next piece of business.

(Whereupon, a recess was taken from 9:45 a.m. to 10:10 a.m.)

SUBCOMMITTEE SELECTION -- 3RD SET OF INDIVIDUAL CASES FOR BOARD REVIEWS

DR. ZIEMER: We're now ready to consider the selection of the third set of individual dose reconstruction cases to be reviewed by the Board. Before we do that, I'm going to ask Stu Hinnefeld from NIOSH to provide us now with the information on the previous selected cases as to the numbers that were compensable and not compensable. Stu, could you give us a quick summary?

MR. HINNEFELD: Right, of the -- of the 38 cases in the first two selection populations or first two groupings, eight of those cases were above 50 percent POC and 30 of them were below 50 percent POC, so that's the breakdown of the consolidation of the first 38.

With respect to a little more definition of where those fell, I know there was interest in the 40 to 50 percent band, I don't have that information for the full 38, but I have it for the second grouping, the 18 that were selected

in the second population. Of those 18, 11 were less than 40 percent, five were between 40 and 49.99 percent, and two were above 50 percent. So those are the -- that's what we -- that's what I can provide right now is about the breakdown of that stratification.

I also know that the -- for the sampling pool as a whole as of December, for -- using that same breakdown of less than 40, 40 to 50 and above 50, 67.4 percent of the cases from that total sampling pool in December were less than 40 percent; 8.1 percent of the cases were between 40 and 50 percent; and 24.5 percent of the cases were above 50 percent. So that was of the sampling population as of December.

DR. ZIEMER: How many total cases in that number?

MR. HINNEFELD: There were some 3,000 in that population.

DR. ZIEMER: Could I ask you just to repeat those again, those percentages?

MR. HINNEFELD: For the December? For the population --

DR. ZIEMER: Yes.

MR. HINNEFELD: -- break down in December, 67.4

percent were less than 40 percent; 8.1 percent were between 40 and 50 percent; and 24.5 percent of those cases were greater than 50 percent POC.

DR. ZIEMER: Thank you. Any -- Board members, any questions on the information Stu's just provided you?

Okay. Now in your packet, tab one behind the summary minutes of the subcommittee meeting, you will find the randomly-selected cases that have been generated for our use here today. In order that we not run into the problem that we had last time where we ran out of cases before we had finished selecting, I asked Larry Elliott to make sure we had a good pool here to work from, so we have -- is this right, 98 -- the next 98 random selections are here.

Now perhaps one other piece of information that's been asked that we have a report on before we make the selection, all of you have received your copies of your cases as a -- as subteams for which cases you will review. It would be helpful if we could have a report from SCA as to their timetable on review of the -- that -- that second 20 -- it's actually 18

cases, and Board members also need to know at what point they can be plugging into those discussions. So either Hans or John, can you tell us where we are on that timetable on those second 18 cases?

DR. BEHLING: At this point I can only say that we've begun to look at them. We have not firmly made any written reports or informal reports regarding those cases. And in truth, the cases that I'm personally going to be reviewing I have not looked at because of all the other commitments I've had in dealing with task three, as well as the revised first 20 cases. So as soon as I get back from this meeting that's going to be my priority to start looking at these dozen or so cases that I personally will review. So at this point only a handful of those second 20 set of cases have been looked at by other people who are part of the SC&A team.

DR. ZIEMER: Thank you. And I think -- I think we can assume that the process will be similar to before, you will have a time in which you will come together and do the internal review, at which time the individual Board members can

be available either in person or by phone to review their cases with you and provide input.

DR. BEHLING: Can I assume that we will use the same protocol, identifying the same --

DR. ZIEMER: Yes.

DR. BEHLING: -- individuals as we did the first 20, that will be again --

DR. ZIEMER: Right.

DR. BEHLING: -- assigned two at a time for each --

DR. ZIEMER: That's correct, and the -- the assignments were made at our last meeting, so if you don't have those, make sure that we get those to -- to you so you know who's on each case.

DR. BEHLING: As soon as we are prepared we will obviously then notify the Chair and -- and make arrangements for a common agreed time to again come to SC&A and by telephone conference conduct this initial review, as we did the first go-round.

DR. ZIEMER: Thank you. Mark?

MR. GRIFFON: Paul, I don't know if this is the point to discuss this. We can certainly do the case selection process first if you want, but I

think we need to discuss just -- just the process of ongoing work here. You know, just the thing we just left a -- before the break was the -- the summary report, the matrix, that I drafted, and rough draft certainly. Someone's got to take the SCA report, together with those -- that draft matrix and come to a final conclusion on that report --

DR. ZIEMER: Yes.

MR. GRIFFON: -- and if we want to do it in a subcommittee meeting next time or -- you know, just the process of -- of ongoing events here.

DR. ZIEMER: Thank you. During the break we -- we got a copy of the SC&A matrix, and we'll have a copy that is in a sense redacted. It's just the general matrix, and we're going to get copies of that made for the Board so that when we have the discussion tomorrow -- is it tomorrow?

DR. WADE: Yes.

DR. ZIEMER: -- of the -- of this subcommittee's recommendation, we will have the opportunity to lay your proposed scheme side by side with the SC&A matrix, and that I think will help us to in a sense merge those concepts

and perhaps have a -- an agreed-on scoring system. So that would be one piece of that.

DR. WADE: We also do have the Board's six-step process that you had agreed upon last time and we can look at that and sort of schedule out the remaining steps in that process. We've only come -- really now approaching the third step, so I think we need to lay that all out tomorrow.

DR. ZIEMER: Yeah, so on the first 20 cases there are a couple of steps that remain to be done before that's finalized, and then presumably that same process then would be used with the next 20, or actually the next 18 cases, a similar procedure. And now that that process is in place, that hopefully will move along a little more smoothly.

Now the way we would normally proceed on -- on this next group would be to move through them one at a time and -- and vote up or down -- whether to retain them in the next group that are reviewed. However, you also have the option to pick out particular ones that meet criteria. The criteria may be probability of causation criteria, it may be facility

criteria, may be cancer type criteria, so we can always jump ahead to identify ones that meet criteria of interest.

And the object will be now to get the next 20 cases.

DR. WADE: Will we look for 22 now to make up the deficit?

DR. ZIEMER: My sense of it is that the way we're -- in terms of our own numbers and SCA's handling, we're -- we're better prepared to handle 20 at a time. The fact that we only had 18, I -- I don't want to necessarily overload the system by saying we'll do 22, although that's certainly up to the Board if you wish to -- it means a couple of the teams will have to handle extra cases if you wish to do that. Otherwise we would stick with the 20, but we can certainly go to 22 if this group wishes to recommend that. Any comments on that? Owen -- Leon Owens.

MR. OWENS: Dr. Ziemer, I would like to do the 22 cases.

DR. ZIEMER: You recommend that we go ahead and select 22?

MR. OWENS: Yes, sir.

DR. ZIEMER: Any other sentiment, pro and con, on that or -- Wanda?

MS. MUNN: (Off microphone) (Unintelligible)

DR. ZIEMER: That mike doesn't appear to be on. Is there a switch on it?

(Pause)

DR. ZIEMER: Is there a lavaliere mike on the podium? Try that. Use that, Wanda, the lavaliere mike. Just make sure it's snapped on. Is there an on switch there?

MS. MUNN: I think --

DR. ZIEMER: Yeah, you're working, Wanda. That's good.

MS. MUNN: Based on our past experience and assuming that our process is now a little smoother than it was during the first two groups that we looked at, the suggestion that we do 22 rather than 20 is probably quite manageable without any difficulty.

DR. ZIEMER: Others are nodding -- I think in assent, so I will take it by consent that we will do 22 cases. Thank you very much. We'll proceed on that basis.

I'm going to propose that we proceed down through the list, unless particular members

wish to recommend particular cases based on any of the parameters that we mentioned, such as probability of causation or other such parameters.

The first case on the list is -- and I'll just use the right-hand digits -- case one, the colon cancer, Bethlehem Steel. I'm going to ask for yeas, yea meaning let's keep it on the list. Am I going too fast?

DR. WADE: Nope, I think they got you.

DR. ZIEMER: Okay, nays?

(Negative indications)

DR. ZIEMER: Okay, preponderance of nays. Incidentally, as we do each one we might review how many such cases we have. For example, on Bethlehem Steel we have already on our matrix four cases from that facility.

Okay, the next case is Savannah River Site, malignant melanoma. Yes?

DR. DEHART: Could I suggest we exclude Savannah from this survey? We've got nine --

THE COURT REPORTER: Dr. DeHart, that's not working.

DR. ZIEMER: Dr. DeHart is suggesting that we exclude Savannah on this list. We already have

nine Savannah River cases.

MR. PRESLEY: I would -- I would go along with that suggestion.

DR. ZIEMER: So any Savannahs that come up here, you want to exclude for the time being. Is that agreeable to the group? So --

MR. OWENS: Dr. Ziemer --

DR. ZIEMER: Yes, Leon?

MR. OWENS: -- I would be agreeable, unless the probability of causation is at such a point where -- in the high 40's.

DR. ZIEMER: Okay. Easy way to handle that then, as these come up I'll just ask if anyone wants to include it as -- if it's a Savannah River Site. Otherwise, we're going to drop it. So we've excluded number two. Number three is another Bethlehem Steel, acute lymphocytic leukemia. Yes? No? No voting? Let me see the no's again. Okay, the no's have it.

MR. GRIFFON: Paul, is it just the subcommittee voting? Jim was asking.

DR. ZIEMER: Well, you remember that everyone here is officially a member of the subcommittee, so you can all vote at this time. It will have to be re-voted on by the full

Board later, but all -- all who are here can vote.

Here's a Savannah River Site -- any yeas for that one? Then it's off.

Another Savannah River Site, any yeas? It's off.

Another Bethlehem Steel, any yeas? It's off.

We have a Y-12 Plant, female genitalia, probability of causation zero. Sounds interesting. Any yeas on that one? Nays? It's off.

MR. PRESLEY: Abstain?

DR. ZIEMER: Abstaining, Robert Presley. I should ask for the abstentions on all of these -- or tell me if you're abstaining so we have it in the record.

Paducah, male genitalia, 44 -- 45 percent POC, yeses?

MS. MUNN: Yes.

DR. ZIEMER: It's on.

MR. OWENS: Abstain.

DR. ZIEMER: Abstain, Leon.

Savannah River Site, lung, any yeses? It's off.

Argonne West, eye cancer, any yeses? No’s?

Off.
Idaho National Engineering Lab, lymphoma, there's a 44 percent POC. Yeses? Abstentions? It's on.
Keep in mind, this -- all these have to be ratified by the full Board later in the meeting, but this will be the form of a recommendation.
Idaho National Engineering Lab, central nervous system, 7 percent probability of causation. Yes? No? Abstaining? It's off.
Incidentally, that, I believe, is the first Idaho case we will have looked at now, just FYI. And ultimately we are looking for 19 Idaho cases. I just want you to keep that in mind as you have rejected. They're not all going to be in the 40 percent range, so just alert you to that. Okay? Is anyone having second thoughts on the one you rejected? Okay.
Portsmouth, lymphoma, less than 1.1 POC. Yeses? No's? Abstentions? It's off.
Here's another Idaho, female genitalia, less than point -- or less than one percent POC. Yes? No? Abstentions? Off.
Los Alamos, breast cancer, 17 percent POC. On

Los Alamos thus far we have no cases. We're looking eventually toward 17. Yeses? No's? Abstentions? That's a yes then.

Another Savannah River, lung cancer, 59 percent POC, roughly. Yeses? No's? Abstentions? It's off.

Another Savannah River Site, non-melanoma, squamous cell, 1.4 percent POC. This is case 17. Yes? No? Let me see the no's again? Okay, abstentions? That's off.

MR. GRIFFON: I thought we were skipping Savannah River unless somebody --

DR. ZIEMER: Yes, if the Chair notices that it's Savannah River and it registers, we'll skip it; otherwise we may end up voting on it anyway. I'm not trying to pressure anybody.

Okay, Feed Materials Production Center, male genitalia, roughly 38 percent. Yeses? And no's? And abstentions? Will -- no, that's on then.

I just want to see where we are on Feed Materials. We have -- this will be the fifth case out of 14, so let's keep abreast of where we are on that.

Next we have another Hanford one, non-melanoma

skin basal cell and esophagus. A yes? Any yeses? No's? Any abstentions?

MS. MUNN: Abstain.

DR. ZIEMER: One abstention, and that's off. The next one is a Bethlehem Steel. Any yeses? No's? Off.

Another Bethlehem Steel, lung cancer. Yes? No? Abstentions? It's off.

Chapman Valve. Chapman Valve I think would appear in that sample of small industry groups. This is a pancreatic cancer, 4 percent POC. Any yeses? I see two yeses. No's? One, two, three, four, five no's. Abstentions? It's off.

On those small industry groups, eventually we're looking for two cases, so...

Next we have Dana Heavy Water Plant. I believe this is in that same category of small -- of sample industry groups. Here we have esophagus, 14 percent probability of causation. How many yeses? One, two, three, four, five. No's? One. Abstentions? One.

MR. GRIFFON: (Off microphone) I'm not (unintelligible).

DR. ZIEMER: No?

MR. GRIFFON: (Off microphone) I'm sorry.
DR. ZIEMER: Okay. That one we're on.
MR. GRIFFON: Paul, I wanted to -- to correct your last point. Small industries were -- eventually we want 83 cases. We're projecting --
DR. ZIEMER: I'm sorry, we have -- yes --
MR. GRIFFON: We have two.
DR. ZIEMER: -- you're right.
MR. GRIFFON: Right, right.
DR. ZIEMER: Eventually we want a lot of cases, yes, I -- sorry, 'cause there are ultimately several thousand in this category, so we do need cases in this group.
MR. GRIFFON: And I think the nature of those cases also we should consider when we're selecting 'cause sometimes they end up being almost a site profile review, you know, or -- or...
DR. ZIEMER: Uh-huh. Thank you. The Chair now recognizes another Savannah River Site. Are there -- anyone -- anyone want to pull this one back on? Okay, that stays off.
Here's a Hanford site, pancreas, 28 and a half percent POC. Yes? One, two, three, four,

five. No's? And abstentions?
MS. MUNN: Abstain.
DR. ZIEMER: One abstention, and that one will be on.
Idaho, malignant melanoma, .02 POC. Yes? No? Abstaining? That one is off.
Oak Ridge Gaseous Diffusion Plant, male genitalia, 38.6 percent. Yes? One, two, three. Abstaining? Two. Off? One, two -- right at the moment that stays on.
The next two Savannahs, anyone wish to keep either of those on? Okay.
Y-12 Plant, ovary, 8.4 percent POC, case 31. Yes? No?
MR. PRESLEY: Abstain.
DR. ZIEMER: Abstain? Two abstentions. That's off.
Bethlehem Steel, respiratory, 57 and a half POC. Yes? No? Abstaining? And it's off. Okay.
Y-12 Plant -- incidentally, on Y-12 we're eventually looking for 59 cases. We have two -- well -- yes, two so far. This is a lung cancer, 59.9 percent POC. Yeses? No's? Four no's. Abstaining? Two. It's off.

Rocky Flats, on Rocky we're looking for eventually 24 cases. We have four thus far. This one is a colon cancer with 4.5 percent POC, case 34. Yes? No? Abstaining? That one is off.

Okay, pause for a moment. We have garnered six cases from that page --

MR. PRESLEY: Seven.

DR. ZIEMER: Seven? Let's make sure I -- case eight, case 11, 15, 18, 23, 25 and 27.

MR. PRESLEY: That's seven.

DR. ZIEMER: Seven cases. Okay. I guess we're making vast strides of progress.

Next page, case 35, Savannah River Site then we would skip, unless someone wishes to keep this one on. It's a POC of over 37 percent. Okay, omitting that one.

Nevada Test Site, for Nevada we're looking for 26 cases and we have one to date, and there's a lot of yeses on this one. It's a 41 percent POC.

UNIDENTIFIED: (Off microphone) (Unintelligible) abstain (unintelligible).

DR. ZIEMER: And abstentions, let's see the abstentions -- one abstention. But this one

stays on.
Dana Heavy Water Plant, malignant melanoma, 33 and a half percent POC. Yes? One, two, three, four, five yeses. No's? Six yeses. No's? One no. Abstentions? That one -- this is the second Dana we will have had. It's staying on for the moment.
Idaho, bladder cancer, 18 percent POC, case 38. Yeses? One, two. No's? Okay. Abstentions? And that goes off.
The next Idaho, 44.9 percent POC, male genitalia, case 39. Yes? All yeses. And any no's? And any abstentions? So that stays on.
Here's another Rocky Flats, male genitalia, 28.9 percent POC, case 40. Yes? No yeses? No yeses. Yes no's? Any no's? All no's. Any abstentions? Case is off.
DR. ANDERSON: (Via telephone) I'm abstaining.
DR. ZIEMER: Oh, yes, Henry.
DR. ANDERSON: I can't see it, so that's okay.
DR. ZIEMER: Okay. Henry, we haven't gotten your votes on these others. I apologize to you.
DR. ANDERSON: That's okay. That's okay, I'm just quietly listening.

DR. ZIEMER: If you -- do you not have the list, Henry?
MR. GRIFFON: He doesn't have the list.
DR. ZIEMER: You don't have the list. You're hearing a brief description. If you object to any of them, yell out, will you?
DR. ANDERSON: (Unintelligible)
DR. ZIEMER: Thank you. Next case, 42, is a Bethlehem Steel colon cancer, 9.5 percent POC.
DR. ROESSLER: You skipped one.
DR. WADE: You skipped --
DR. ZIEMER: What did I skip here? Oh, I skipped -- I'm sorry, I skipped the --
DR. ROESSLER: Number 40.
DR. ZIEMER: I skipped -- I skipped Fernald, number 41, did I not? Okay. I'm sorry, this is case 41, bladder cancer, 30.9 percent POC. This is the Feed Materials Production Center. Yes? One, two, three, four yeses. Any no's? Two no's? Abstaining? It stays on.
Now we're ready for case 42, Bethlehem Steel. Yes? No? Many no's here. Abstentions? Those were all no's. Okay.
Y-12, bladder cancer, 33.5 percent POC. Yeses, one, two, three, four yeses. No's?

Abstentions? Two. That stays on.
Y-12, lung cancer, 61.7 percent POC, case 44. Yes? One yes. No's? One, two, three, four no's. Two abstentions.
Lew, could I ask you to continue through this list? I'm losing my voice here. You can proceed --

DR. WADE: Sure, I'll --

DR. ZIEMER: -- the same way. We're at -- we're at case 45.

DR. WADE: We've completed 45?

DR. ZIEMER: We've completed 44.

DR. WADE: Okay.

DR. ZIEMER: We're going to pause here for a moment. I'm informed that Senator Bond has arrived and we'd be pleased to have the Senator address the panel, as well as those here in attendance. Here --here we come.

UNIDENTIFIED: The Senator's answering questions for the press.

DR. WADE: The Senator is answering questions. I mean it could take a while or he could appear at the door any minute, I guess. Shall we do several more?

MR. OWENS: Yes, sir.

DR. WADE: Okay. Okay, so we have now to do case 45, which is a Savannah River Site with the Chair's option. Does anyone want to have us consider case 45, Savannah River Site? Seeing no yeses, we'll move on.

Case 46, also Savannah River Site, does anyone want to make an argument for yes for case number 46 from the Savannah River Site? Seeing no argument, we'd move on to case 48.

From the Y-12 Plant, probability of causation 28.43, breast cancer. Can I see a show of hands for yes? One yes. A show of hands for no? One, two, three, four. Abstaining? One, two. So that would be a no.

Case 49, Hanford, 2.12 probability of causation. A show of hands for yes? A show of hands for no? One, two, three, four -- everyone. Abstaining? Wanda abstains.

On to 50, again Savannah River Site, using the Chair's discretion, does anyone want to say yes to Savannah River Site, case number 50? Seeing none, we'll move on.

Case number 52, Idaho and the Nevada Test Site, probability of causation 22.72. Yeses? One, two, three, four, five yeses. No’s? Two no’s.

Abstain? So that one would get added to our list.

Number 53 from Han-- from Hanford, urinary organs excluding bladder, thyroid, 55. Yeses?

DR. ROESSLER: We need some over 50.

DR. WADE: Okay. With the comment that we need some over 50, we have four yeses. No's? Two no's and one abstaining, so that would be a yes.

You only need to ask and you get what you ask for.

Number 54, lung from the FMPC, 75 percent probability of causation. Show of hands for yes? Show of hands for no? One, two, three, four, five, six, seven -- everyone. That's a no.

Number 55, all male genitalia from Savannah River. Again, does anyone want to make the argument that we should add this Savannah River Site case? Hearing no arguments, it'll be a no and move on to 56.

Other respiratory, also Savannah River. Anyone want to make the argument for including this Savannah River Site? Hearing none, it's a no to 56.

On to 57, another respiratory from the Y-12 Plant, 9.54 probability of causation. A show of hands for yes? One. No? One, two, three. Abstain? One, two. That would be a no.

Number 58, Lawrence Livermore National Labs, a nervous system, 13.82 probability of causation. Yeses? One, two, three, four, five, six -- everyone says yes. No no's, no abstaining, so that's added to the list.

Number 59, Savannah River Site, 57, thyroid, anyone want to make the argument to add? Seeing no argument, we move on to number 60.

INEL, 15.5, lymphoma. Show of hands for yes? I see none. Show of hands for no? One, two, three, four, five, six. Abstain? That's a no.

Number 62, Pacific Northwest National Laboratory and Hanford, lymphoma at 28.13 percent. A show of hands for yes? One, two, three, four, five. A show of hands for no? One. Abstaining? One. So that would be added to the list.

Number 63 from Rocky Flats, a breast cancer at 36.82 percent probability of causation. Show of hands for yes? One, two, three, four, show- - five. Show of hand for no? One.

Abstaining? That would be added to the list. We move on to 64 from Bethlehem Steel, stomach, lymphoma and multiple myeloma, 5.8. Show of hands for yes? Show of hands for no? One, two, three, four, five, six. Abstaining? That's a no.

Number 65, all male genitalia from Hanford, 43 percent. Show of hands for yes? One, two, three. Show of hands for no? One, two, three. Abstaining? One. Henry are you on the phone?

DR. ANDERSON: (Via telephone) Yep, I'm here.

DR. WADE: What do you say as to number 65?

DR. ANDERSON: I -- I can't --

MR. GRIFFON: He doesn't have the sheet.

DR. WADE: Doesn't have a sheet? I'm sorry. Okay, we'll have -- that one --

DR. ZIEMER: The Chair will vote for it and we'll keep it on.

DR. WADE: The Chair will vote for it so it will be on.

Number 66, all male genitalia from Rocky Flats at 17.73. Show of hands for yes? Show of hands for no? One, two, three, four, five, six, seven -- everybody says no, that's a no.

Number 67, a Savannah River Site with a low

probability of causation. Anyone want to make the argument to include? Hearing no argument, that's a no.

Number 68 from Bethlehem Steel, lung, 56.90. Yes? One. No? One, two, three, four, five, six. No abstentions. It's a no.

Number 69, colon from Paducah, 34.25 percent probability of causation. Yes? One, two, three. No? One, two. Abstaining? One. So that's three to two yes? It'll be added.

Number 70, Pantex, 18 percent probability of causation, non-melanoma skin, basal cell. Any yeses? One, two, three, four, five, six. No's? Abstaining? That's added.

Number 71, Y-12 leads a long list, all male genitalia at 31.68. Yeses?

MR. OWENS: I have a question on this case. It shows the years worked as 56.8 years, and the decade is 1970. Is there some problem with the...

DR. WADE: It would appear. Can we have clarification from the NIOSH staff? Stu?

MR. HINNEFELD: Well, I wish I could but I can't, so I can try to figure out back at the -- I can call back and try to figure it out, but

I don't have an explanation right now.

DR. WADE: Please do, Stu. Thank you. Do we wish to table that one or we want to vote on it now?

DR. DEHART: You already have 20.

DR. WADE: Anyone object if we move past that one, given the fact that the data is confusing? Hearing no objection, we take a deep breath and we take stock and we are at 20. Is that correct?

DR. DEHART: I think so.

DR. WADE: Okay.

DR. ZIEMER: Two more.

DR. WADE: Two more? Let's continue on. Number 72, Rocky Flats, breast cancer, 42.88 percent. Yeses? One. No’s?

DR. ROESSLER: Yeses?

DR. WADE: I'm sorry, yeses? We'll do yeses again. One, two, three. No’s? One, two, three, four, the no’s have it.

We move on to 73, INEL, bladder at 32.25 percent. Yeses? One, two. No’s? One, two, three, four, five. No.

Number 74, colon at Hanford at 40.16 percent. Yeses? One, two. No’s? One, two, three,

four. Abstaining? One. That's a no.
Number 75 is a Savannah River Site. Anyone wish to raise the issue that this should be included? Hearing none, we move on to 76. That's a lung at Bethlehem Steel, very high probability of causation, 83.17. Yeses? No's? One, two, three, four, five. Abstaining? One. We move on to 77.
FMPC at 56.16 percent, let's suspend discussions there. I think the Senator is about to join us. Paul?

WELCOME FROM SENATOR BOND

DR. ZIEMER: Okay. We're pleased to have Senator Kit Bond from Missouri with us today. Senator, this is the Advisory Board on Radiation and Worker Health. We're pleased to have you here with us this morning. You can use the podium up here. Welcome.

SEN. BOND: (Off microphone) Thank you very much, and thank you so much for coming. Thank you very much for coming.

(Pause)

SEN. BOND: (Off microphone) Currently I'm not too worried about having a microphone. Since the time when I was first campaigning for

office I was addressing a group in a large room like this and somebody in the front said I can't hear, then somebody in the back said I can't hear the speaker, and a fellow in the front said I can and I'd be happy to trade places with you, so Charlie, is it working back there? Charlie?

UNIDENTIFIED: (Off microphone) Yes, sir?

SEN. BOND: (Off microphone) The guy in the back of the room can't hear.

UNIDENTIFIED: (Off microphone) No, we can't --

DR. ZIEMER: Yeah, let's wait just a moment because we also -- we are required to record what you say, Senator, for our proceedings, so we'll get one here shortly. Or we can use one of these. There we go.

SEN. BOND: All right. Now, this is -- this may work a little bit better. Well, good morning and on behalf of my constituents in Missouri, it's my pleasure to welcome you to St. Louis and the great state of Missouri. I extend a very special thanks to the members of the NIOSH Advisory Board on Worker Safety and Radiation Health for your dedication and service in ad-- in advising NIOSH on the

numerous complex issues that come before your Board. Your input and guidance in helping NIOSH resolve these issues is crucial to the effective implementation of NIOSH's responsibility under the Energy Employees Occupational Illness Compensation Program Act of 2000. EEOICPA, for those of us who like acronyms in Washington.

But the President, the Congress and affected stakeholders in Missouri all appreciate your efforts in helping to make sure these former nuclear workers or Cold Warriors are compensated appropriately in a timely manner.

I thank Dr. John Howard, Lew Wade and the rest of the staff at NIOSH for coming to St. Louis to make a recommendation on the Special Exposure Cohort site designation for the Mallinckrodt downtown or Destrehan site. I've had many, many telephone conversations and I appreciate the good work that Dr. Howard and his staff have done with my staff.

But over a year -- and I offer a formal statement regarding the Special Exposure Cohort for the downtown site and ask that it would be submitted for the record. I will refer to the

Special Exposure Cohort and its acronym of SEC. Over a year ago I wrote to the Secretary of Health and Human Services, at that time the Honorable Tommy Thompson, about the urgent need to designate the former Mallinckrodt nuclear production sites in Missouri as an SEC under the EEOICPA. At the time, I cited the fact that the Mallinckrodt sites, particularly the downtown site, have the same extraordinary circumstances as the four existing SEC sites in Alaska, Ohio, Kentucky and Tennessee. These circumstances include missing or incomplete medical and personal exposure records, as well as the fact that Mallinckrodt workers handled highly toxic radionuclides such as plutonium, refined uranium and the extremely dangerous Belgian Congo pitchblende ore. In fact, a former Atomic Energy Commission official said that the Mallinckrodt downtown site was one of the two worst plants in the country in the terms of levels of radioactive contamination. The Mallinckrodt downtown site had levels of contamination that were over ten times the level at the Paducah site, which was previously considered the worst, and is one of the four

existing SEC sites.
In the letter I sent to Secretary Thompson I also told him I'm convinced that the Mallinckrodt sites in Weldon Spring and downtown St. Louis met the two statutory criteria for inclusion in the SEC. These criteria, as you well know, are, one, it is not feasible to estimate with sufficient accuracy the radiation dose that a class of employees received; and two, there is a reasonable likelihood that such a radiation dose endangered the health of members of a class of employees.
Now this one is pretty obvious for the Mallinckrodt workers. All you have to do is do what I have done and -- to look at the Mallinckrodt workers, the workers with cancer, the ones who have already died of cancer, and the other illnesses they've experienced.
Well, unfortunately, it's now over a year later after I wrote to Secretary Thompson and there's been no designation or resolution for these workers. In the meantime, these former workers are dying while waiting for NIOSH to perform its dose reconstructions. So far, over 30 more

Mallinckrodt workers have died while waiting for NIOSH to process these claims.

I've had the privilege, as I said, to meet a few of these workers before they passed away.

Just last month I wrote again once more to Secretary Thompson to make him aware of additional newly-uncovered evidence which indicates an accurate dose reconstruction for Mallinckrodt employees is not available, and that those employees should be designated as a Special Exposure Cohort or SEC. This new evidence includes, one, documentation from Mallinckrodt and Atomic Energy Commission officials identifying missing and possibly destroyed records of the Mallinckrodt downtown site, which would be critical to any matching of workers to jobs and exposure levels; two, a memo from a Mallinckrodt safety official to an AEC contractor suggesting that the contractor conceal or not include in his records the results of an important dust study at the downtown site as a way to limit the company's liability for exposing employees to high levels of radioactive dust; three, a Mallinckrodt document indicating that the company's chemical

laboratory will be unable to analyze routine urine samples of Mallinckrodt personnel at the downtown site -- in the same document, lab officials said that these lab -- these samples should no longer be sent to them; four, a Mallinckrodt Chemical Works document which indicates that Mallinckrodt officials falsely recorded internal, external and breath radon exposures as having zero exposure, when in fact no exposure tests were conducted for these employees at the downtown site.

So we have fraudulent data here. How can NIOSH perform the accurate dose reconstructions when we have evidence of these -- these problems and that they -- we -- they cannot adequately complete dose reconstruction for those employees.

In February of 2004 NIOSH wrote these same former employees and their survivors, saying that they were ready to proceed with their dose reconstructions. Now, almost a year later, NIOSH says they need to resolve some more issues before they can proceed with those dose reconstructions. My question is, how long do these people have to wait. A good portion of

these workers have been waiting for dose reconstruction for over four years now.
With all due respect, I believe this current pace of dose reconstruction is not consistent with the intent of the passage and signing of EEOICPA, which is to compensate these diseased workers in a timely manner. I believe that this newly uncovered evidence clearly shows it is simply not feasible for NIOSH to perform any type of dose reconstruction on these former Mallinckrodt workers with any degree of accuracy. There are too many complicating factors and too much missing and inaccurate worker data that make it virtually impossible for NIOSH to proceed with dose reconstructions for these workers with any degree of credibility. This is especially true of the former workers at the downtown site.
Even before these new disclosures came to light, the case for Mallinckrodt workers was strong, in my opinion. With these recent discoveries, I'm even more convinced that these former workers and their survivors have waited over 50 years for the Federal government to compensate them for the heroic and costly

sacrifices they made in helping America win the Cold War.

Now I know that this Board has very difficult issues to resolve, and there have been calls for additional information and more information, and I understand that. I like to act on the best information available. But I respectfully suggest that the information that one would want is probably not going to be there. It's faulty, it didn't exist or it was fraudulently changed. Under these circumstances, I believe the time has come to bring this issue to a conclusion.

The only acceptable decision, in my view, is for NIOSH and the Advisory Board to make this -- we -- would be to allow the immediate compensation from the Federal government. A Special Exposure Cohort designation for all the former employees who worked at the Mallinckrodt downtown site from 1942 to 1957 would do just that.

I earnestly submit these suggestions. I thank you very much for giving me the opportunity to speak. As you know, this was not supposed to be a presentation day, but I happen to have a

responsibility to go punch a time clock in Washington late this afternoon and will not be able to be with you. I know that you'll hear some very interesting and I hope compelling testimony. But most of all, on behalf of the Mallinckrodt employees and the people of this metropolitan area who are following their case very closely, I extend our sincere thanks to you for being willing to do this very difficult job and to take on this task. And I wish you well in the exercise of that task.

DR. ZIEMER: Thank you. Senator Bond, we thank you for taking time out of your busy schedule today to be with us, and we appreciate your remarks, all of your remarks, and your written testimony will be of course on the record. We recognize that you do have to head back to Washington, but thank you for taking the time to be with the Advisory Board today. We appreciate your being here.

SEN. BOND: I'm honored to have the opportunity. Thank you, Mr. Ziemer.

3RD SET OF CASES FOR BOARD REVIEWS (CONT'D)

DR. WADE: Okay, Mr. Chairman, we'll get back to the work at hand?

DR. ZIEMER: Yes, I think we have two additional cases to select.

DR. WADE: Okay. And if my notes serve me correctly, we just resolved 76, we're on to 77, which is FMPC, a 56.16 percent probability of causation. If I could see a show of hands for yes? One, two. No? One, two, three, four, five. Abstain? So that's a no.

Number 78, Y-12, breast at 6.55. Yes? No? One, two, three. Abstain? One, two. No.

Number 79 is a Savannah River Site. Does anyone wish to raise the point that this should be included or debated? Seeing none, we'll move on to 80.

A bladder at Bethlehem Steel at a low probability of causation, 4.24. A yes? Any no's? One, two, three, four, five -- abstain? That's a no.

Number 81, Y-12 et al, rectum, 21.45. Yeses? One. No's? One, two, three, four. Abstain? One. That's a no.

Number 82, Nevada Test Site, 14.02 ovary. Yeses? No's? Excuse me, is that -- let me go back, I'm sorry. Yeses? One. No's? One, two, three, four, five. That's a no.

Number eight-- abstain? I'm sorry. Mark abstains.

Number 83, Savannah River Site. Anyone want to argue for this Savannah River Site? Very high probability of causation. No argument, move on to 84.

Bethlehem Steel, lung, 65.96. Yeses? No's? One, two, three, four, five, six, seven. No abstaining. No.

Number 85, Bethlehem Steel lung at 74.22. Yeses? No's? One, two, three, four, five -- no's have it.

Number 86, INEL, lymphoma, 20.97 percent. Yeses? One, two, three. No's? One, two, three, four. The no's have it.

Number 87 is a Savannah River Site. Anyone wish to argue for this Savannah River Site? Hearing none, we move to 88.

Pacific Northwest Laboratory, breast at 24.47 percent. Yeses? One, two. No's? One, two, three four. It's a no.

MS. MUNN: Abstain.

DR. WADE: One abstain, Wanda. Eighty-nine, Rocky Flats, other respiratory, 53,61. Yeses? One, two, three, four, five, six -- all yeses.

Any abstains or no? So we've got our 21st. Number 90, INEL, other respiratory at 6.70. Yeses? No's? One, two, three, four, five, six. No's have it.

Number 91, Savannah River Site -- anyone wish to argue for this Savannah River Site? Hearing none, it's a no.

DR. ZIEMER: Here's one close to 40 percent, folks, in case anyone is looking for --

MS. MUNN: Yes, but it's a type that we have seen on several other occasions. If we were going to argue --

DR. ZIEMER: Just calling attention to it.

MS. MUNN: If we were going to argue for a Savannah River Site I'd go back to 67, even though it's a very low POC. It's a type that we have not observed earlier, but we can do that after we're finished.

DR. WADE: Right. Let me ask again for a show of hands. No on 91? One, two, three, four -- okay, so it stays a no.

Ninety-two, Nevada Test Site, all male genitalia, 16.17. Yeses? No's? One, two, three, four, five. Abstain? One. It's a no.

Number 93, INEL, 15.65. Yeses? No's? One,

two, three, four, five, six. It's a no.
Number 94, Blockson Chemical, colon, very low probability of causation. Yeses? One. No's? One, two, three, four, five, six. It's a no.
Number 95, Rocky Flats, all male genitalia, 27.59. Yeses? One. No's? One, two, three, four, five, six. It's a no.
Number 96, Pantex, the pancreas at .02. Yeses? No's? One, two, three, four, five, six, seven. It's a no.
Number 97 is a Savannah River Site, all male genitalia at 35.69. Anyone wish to make the argument? Hearing none, it's a no.
Number 98, Y-12 Plant, Oak Ridge Gaseous Diffusion (K-25), all male genitalia, 30.39. Yeses? One. No's? One, two, three, four. Abstains? One, two. It's a no.
Number 99, Argonne National Laboratory East, Metallurgical Laboratory, 56.65. Yeses? One, two, three, four, five, six. No's? One. Abstains? We have our 22nd.
DR. ZIEMER: That's it.
DR. WADE: And last is a Savannah River Site. Mr. Chairman, it's back to you.
DR. ZIEMER: Thank you very much. So this will

constitute the next 22 cases. Well, we -- this will need to be ratified by the full Board later in the meeting, but this is -- this then will be the recommendation to the full Board. Thank you, Dr. Wade, for helping out with that process.

MR. RICHARD MILLER: Excuse me, Dr. Ziemer?

DR. ZIEMER: Yes.

MR. MILLER: I'm sorry, I realize this is not a public comment period, but I just would -- in the course of your selection wanted to bring one detail to your attention. From an Indiana facility, which is the Dana Heavy Water Plant, they handled no radioactive material there. The -- those only -- the only reason those two cases are there -- it's a deuterium facility, and to my knowledge there was no -- there was no ionizing radiation at that facility. The only reason you have probability of causation, I believe -- and NIOSH should definitely jump up and correct me if I'm wrong, but my understanding is the only reason there's any is because of the medical X-rays, you know, or medical -- occupational medical. And so if you're using scarce resources for audit, you

may want to consider whether you want to audit a facility like that.

DR. WADE: Thank you.

DR. ZIEMER: Thank you for that comment. John Mauro?

DR. MAURO: Excuse me, with the permission of the Board, I would like to remind the Board that our contract calls for 62 cases, two of which will be referred to as blind profiles, so I know you have now selected a total of 60, and now we -- there still remains two more that need to be selected for what's referred to as blind dose reconstructions. And I also would like to remind the Board that I believe a total of -- out of the 60 audits, I believe 20 of them were identified as what's referred to as advanced reviews. To date we have performed basic reviews, and the distinction fundamentally between the advanced and the basic have to do with further research into the data and into the -- the CATI and the -- and the workers. I just want to alert the Board to that.

DR. ZIEMER: Thank you, John, for that reminder. The 62 is not ultimately the total

worked, but it's what's covered in the current task order. And so the Board could in fact add the other two so that the -- the content of that task order could be completed. So again -- leave it to the work -- or the subcommittee if you wanted to identify an additional two cases from the list, that would allow us to complete the 62 that are identified in that initial task order. Otherwise we're left with two hanging, as it were.

MS. MUNN: Let's do it.

DR. ZIEMER: You want to identify two more? Someone want to make a case for any of the ones that we bypassed?

DR. ROESSLER: What was the one where the vote was tied?

DR. ZIEMER: That one was added.

DR. ROESSLER: It was added?

DR. ZIEMER: Yes, the Chair voted for it, so that's already on the list.

MR. OWENS: Dr. Ziemer, the case that Wanda had mentioned -- I believe it was case number 67, it's connective tissue. I know it's a low probability of causation --

DR. ZIEMER: Extremely low POC. Did you want

to make the case for including that?

MS. MUNN: In the --

MR. OWENS: Yes, sir, I would.

MS. MUNN: Yeah, in light of the fact that one of our criteria was to cover as broad a spectrum of types of disease as possible, and since this is one of the few I've seen with this particular diagnosis, I would find -- even with the low causation -- that we'd have good reason to review it.

DR. ZIEMER: Okay. You've heard Wanda's comments. How many of you would favor adding this one? One, two -- one, two, three, four, five. Opposed? Abstain? Two abstentions. So that one gets added. That's number 67.

DR. WADE: We have Larry Elliott at the mike, as well.

DR. ZIEMER: Larry?

MR. ELLIOTT: Yes, Dr. Ziemer, Larry Elliott with NIOSH. As it -- as I think about what Dr. Mauro just presented to you, you might want to consider -- and I think this goes to Mark Griffon's preliminary efforts in identifying basic, advanced and blind reviews -- I would suggest to you that if you select a -- two

blind -- two cases for blind dose reconstruction by Sanford Cohen & Associates, they should not contain the POC that we have generated. So you want -- I think you would want to gene-- select those from cases that don't have that identified.

DR. ZIEMER: Thank you. Then these won't be eligible for that, in that case, 'cause they -- they need to -- they need to operate in a blind fashion. Others? Mark?

MR. GRIFFON: So what are -- what are we doing with that case?

DR. ZIEMER: John, did the 62 incl--

MR. GRIFFON: Included the two blind.

DR. ZIEMER: Remind us on the task order, were the 62 the regular reviews or was it 60 plus two?

DR. WADE: Sixty plus two blind.

DR. ZIEMER: Oh, 60 plus two blind.

DR. MAURO: Sixty plus two, and the --

DR. ZIEMER: Oh, okay.

DR. MAURO: -- and the blind are of such a nature that we would not see the dose reconstruction or, as correctly pointed out by Larry Elliott.

DR. ZIEMER: But this is a problem if you know, a priori, the POC, that's an issue.

DR. MAURO: That -- that -- that's correct.

DR. ZIEMER: So --

MR. GRIFFON: Yeah, we've got to take it off.

DR. ZIEMER: So it appears that we should hold this in abeyance then, at the moment. We would need a different list to generate those other two.

MR. GRIFFON: Oh, the other -- the other question I had, given Richard Miller's comment about the Dana Heavy Water Plant, I mean do we want to set those aside until we hear more about that plant and maybe reconsider those at another point, or -- or at least replace one of those maybe with this last one that -- number 67, might be an option.

DR. ZIEMER: Are you proposing that?

MR. GRIFFON: I'm proposing to keep number 23, Dana Heavy Water Plant, and drop number 37 and replace that with number 67.

DR. ZIEMER: The proposal is to drop number 37 and replace it with number 67. Robert?

MR. PRESLEY: If we drop any right now -- I have a question on that because right now would

be a good time to do those two. We -- chances of us doing a site profile on that small company would be slim and none. It might be good to take the information from both of those and do them at one time.

MS. MUNN: I'd support that.

DR. ZIEMER: What's that?

MS. MUNN: Bob's suggestion.

DR. ZIEMER: Okay. What's the -- what are the wishes of the group?

MR. GIBSON: I second Mark's motion.

DR. ZIEMER: Okay, Mark's --

MR. GRIFFON: I just imagine, and I'm guessing here -- maybe NIOSH can help us out, but I imagine that the data -- the Dana Heavy Water Plant probably has one Technical Basis Document or one site profile that they're basing all the DRs on. I don't know. So if we were to do one case I think we'd get a sense for most of them.

MR. HINNEFELD: Dana Heavy Water is essentially a site dose model, so it'll -- it'll be fairly consistent except for the -- there'll be different organ dose conversion factors, but other than that it'll essentially be the same.

DR. ZIEMER: Okay.

MR. GRIFFON: So I think reviewing one of them would be more than adequate --
DR. ZIEMER: Right.
MR. GRIFFON: -- for our purposes.
DR. ZIEMER: So the proposal is to drop that second Dana and substitute the case number 67. All in -- all in favor of doing that, raise your hand? Opposed? Abstentions? Okay, so we're dropping number 37 -- is that correct?
DR. WADE: Correct.
DR. ZIEMER: And adding number 67. We're back to 60 cases, which would be the 60 regular cases. We don't really have a list before us that we can use for the blind reviews, so we may have to select those separately. Okay? Is that agreeable then? This will be our recommendation to the full Board. Any other comments on this issue? Then we're going to recess for lunch. We --
DR. WADE: If I could just --
DR. ZIEMER: Oh, yeah, Lew.
DR. WADE: I do have the SC&A sort of methodology incorporated in this table. I'll give you out copies of it. It's for us to compare and contrast to the work that Mark did

for tomorrow's discussion, so -- and it'll be available for the public.

DR. ZIEMER: These will be available for the public. It's a -- it's the rating matrix that's based on the SC&A review.

We're going to then recess till 1:00 o'clock -- oh, sorry -- oh, Henry?

DR. ANDERSON: I just want to know, are you going to hold to the schedule? 'Cause I'm going to then come back on for the site profile review if that's still going to be at 3:00.

DR. ZIEMER: That's correct.

DR. ANDERSON: Okay.

DR. ZIEMER: Thank you, Henry. And --

DR. ANDERSON: (Unintelligible) go to lunch.

DR. ZIEMER: Okay, so we'll --

DR. ANDERSON: I'll go have breakfast.

DR. ZIEMER: Yeah. So we'll recess till 1:00 o'clock. Thank you.

(Whereupon, the meeting of the subcommittee was concluded 11:30 a.m.)

C E R T I F I C A T E OF COURT REPORTER

STATE OF GEORGIA

COUNTY OF FULTON

I, Steven Ray Green, Certified Merit Court Reporter, do hereby certify that I reported the above and foregoing on the day of February 7, 2005; and it is a true and accurate transcript of the testimony captioned herein.

I further certify that I am neither kin nor counsel to any of the parties herein, nor have any interest in the cause named herein.

WITNESS my hand and official seal this the 2nd day of March, 2005.

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STEVEN RAY GREEN, CCR

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