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

WORKING GROUP

ADVISORY BOARD ON

RADIATION AND WORKER HEALTH

PROCEDURES REVIEW

The verbatim transcript of the Working Group Meeting of the Advisory Board on Radiation and Worker Health held in Cincinnati, Ohio, on Dec. 11, 2007.

STEVEN RAY GREEN AND ASSOCIATES
NATIONALLY CERTIFIED COURT REPORTERS
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C O N T E N T S

Dec. 11, 2007

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-- "uh-huh" represents an affirmative response, and "uh-uh" represents a negative response.

-- "*" denotes a spelling based on phonetics, without reference available.

-- (inaudible)/ (unintelligible) signifies speaker failure, usually failure to use a microphone.

P A R T I C I P A N T S

(By Group, in Alphabetical Order)

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BURGOS, ZAIDA, NIOSH
CHANG, CHIA-CHIA, NIOSH
ELLIOTT, LARRY, NIOSH
FIX, JACK, ORAU
GUIDO, JOE, ORAU
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SMITH, MATTHEW
THOMAS, ELYSE, ORAU
WADE, LEWIS, NIOSH

P R O C E E D I N G S

DEC. 11, 2007

(9:30 a.m.)

OPENING REMARKS

DR. BRANCHE: Hi, this is Christine again; I just want to check to make certain who the board members are on the phone, please.

Good morning, we're ready to begin the working group on procedures that's meeting today beginning at 9:30. I'm Dr. Christine Branche from NIOSH. We have Wanda Munn and Robert Presley here with us in Cincinnati and Michael Gibson participating by phone. Are there any other board members who are participating by phone?

(no response)

Okay. Can we please begin with an introduction of NIOSH staff beginning with people who are here in the room.

MR. ELLIOT: Larry Elliott, NIOSH.

MR. HINNEFELD: Stu Hinnefeld from NIOSH.

DR. WADE: Lou Wade with NISOH.

MR. PRESLEY: Robert Presley with the Board.

MS. THOMAS: Elyse Thomas with the ORAU team.

MS. HOWELL: Emily Howell, HHS.

DR. MAURO: SC&A, John Mauro.

MR. MARSCHKE: Steve Marschke with SC&A.

DR. MAKHIJANI: Arjun Makhijani with SC&A.
DR. BRANCHE: Are there any other NIOSH staff participating by phone?
MS. BURGOS: Zaida Burgos, NIOSH.
DR. BRANCHE: Thank you.
MS. CHANG: Chia-Chia Chang.
DR. BRANCHE: What was that last name please?
DR. WADE: Chia-Chia Chang.
DR. BRANCHE: Chia-Chia, okay thank you. Are there any other ORAU staff participating by phone?
MR. ELLIOTT: Dr. Ziemer's on his way.
MR. SIEBERT: Scott Siebert from the ORAU team.
MS. BRACKETT: Liz Brackett with the ORAU team.
MR. SMITH: Matthew Smith --
MR. FIX: Jack Fix, ORAU team.
DR. BRANCHE: Thank you. Are there --
MR. LABONE: Tom LaBone.
DR. BRANCHE: Okay.
MR. GUIDO: Joe Guido, ORAU team.
DR. BRANCHE: Are there any other SC&A staff participating by phone?
DR. OSTROW: Steve Ostrow.
DR. ANIGSTEIN: Bob Anigstein.
DR. BRANCHE: Who is -- Okay I got Bob, who was the other person?

DR. OSTROW: Steve Ostrow.
DR. BRANCHE: Thank you.
DR. WADE: And one other.
MS. BEHLING: Kathy Behling.
DR. BRANCHE: Thank you. Are there other federal agency staff participating by -- are there -- participating by phone?
MR. KOTSCH: Jeff Kotsch, Department of Labor.
DR. BRANCHE: Are there petitioners or their representatives participating by phone?
(no response)
DR. BRANCHE: Petitioners or their representatives?
(no response)
DR. BRANCHE: Are there workers or their representatives on the line?
(no response)
DR. BRANCHE: Are there any members of Congress or their representatives on the phone?
(no response)
DR. BRANCHE: Are there any others who'd like to mention their names for the record?
(no response)
DR. BRANCHE: Okay. Thank you very much for coming to participate in this meeting today. And for those of you who are participating by phone we do ask that you

mute your line until you're ready to speak. By muting your line you'll allow us to not know how you're using your time at your keyboard or other ways and also it would allow all the participants on the line to hear every word of the discussion. If you are ready to speak by phone please let us know. And thank you so much. Ms. Munn.

INTRODUCTION BY CHAIR

MS. MUNN: Thank you, Doctor. We have received information that Dr. Paul Ziemer is on his way in to our meeting and will be here in another five minutes or so. I don't think we need to wait for Paul because he's well briefed on what we expect to do. Are all of the members of the workgroup and support staff aware of our proposed agenda for today? You should have it in hand. If not let me know and I'll try to give you my copy to work with for a moment. At this moment I'd like to ask for any additions or revisions to that agenda. Does anyone have any material other than what we have currently proposed for today?

(no response)

DISCUSSION OF 4 "NEW MATRIX" DOCUMENTS

MS. MUNN: If not then we'll continue with the first item. We have Kathy Behling on the telephone. Kathy and her team have been working very hard at SC&A to

put together the new format that has given us so much grief over the past few months and have made excellent progress on it. I think most of the folks here have either hard copies or have electronic copies of material that Kathy has sent out in the last two or three days. John?

DR. MAURO: Yes Wanda, in addition to the electronic copies, the four files that Kathy sent out electronically earlier, she asked me to distribute this package to everyone here. And it would really be fundamental database, the Access database upon which we -- that we use to build the four files that everyone has and she wanted to say some words about this tool because it's a new strategy, we've been working with Word or Excel, this is the first time we are using Access which is a bit more powerful tool and she thought it'd be worthwhile spending a few minutes describing the fundaments of this thing so that it get a better appreciation of this new Matrix approach.

MS. MUNN: For those of us who are not regular Access users which includes me, this will I expect be very helpful and my special thanks to Kathy for having gotten this into our hands over the weekend so that we could at least have some concept of how it's going to go. Kathy, are you ready to address this?

MS. BEHLING: Yes, I am.
MS. MUNN: Please do. Go right ahead. We now have the hard copies of what's been provided in hand as well as an electronic copy.
MS. BEHLING: Okay, very good. Can you hear me all right?
MS. MUNN: You're fine.
MS. BEHLING: Okay, very good. Yeah, we will start with the information that John just passed around. This is actually screen views of the Access database and I felt that this would give everyone a better understanding of how we're entering this data, what we can do with the data, how we can sort things and also for NIOSH's purposes although they may be more familiar with this than some of the rest of us, this is how we're going -- this is the format and the information the screens that we're going to be using to actually enter the data. And page one of the information that John just sent to you and that I also electronically format -- forwarded to you is the main form summary screen that comes up. And I'll just briefly walk you through and bear with me for those of -- those of you who have a better understanding of Access, but this first screen is the main form that opens when you open up the Access database that we

have created. And if you look to the left, upper left side, underneath the exit button there are three tabs. And the first tab is the summary tab and that's what's open on your main screen. And this is actually our rollup table and you'll see obviously the first column is our finding date and procedure number, finding number and page number in the third column. Then we have our rating in the fourth column and our procedure title and then the status. And you can go into any one of these columns, highlight that column, do a right click and you can sort that column ascending, descending, you can do filtering on these columns. So I -- for the purposes of this demonstration I sorted everything by procedure number. So you see the first page of the summary sheet. Now, in this particular instance when you first open it up we're only looking at anything that is not closed; opened items, transferred items, items in abeyance. If we wanted to also include on this summary sheet closed items; if you go more to the upper middle portion of this screen you see a print summary, a detailed -- a print detail and underneath there, there is a box called include closed issues. And if you check mark that box this screen will change and include all of your closed items also. So we have the option of including them

or not including them.

DR. WADE: Kathy, this is Lew Wade. Just a trivial point but in my first sheet I see closed items appear. So maybe this is the full -- the full? Correct?

MS. BEHLING: Um, yeah, I see closed items on there too and --

DR. MAURO: Kathy I --

MS. BEHLING: Actually I have my Access database open and I'm looking from on my screen and I do not have that check marked and the closed items are not on there. Perhaps when I made a copy of this screen I had opened up the closed -- I will -- I will check on that but I'm -- I'm sure because I'm actually looking at my database on my screen as opposed to the documents that you're looking at. But you're correct; there are closed items on there. They should not be on there because that check mark is not in that closed issues box so I apologize for that.

DR. WADE: Computers, you can't live with them; you can't live without them.

MS. MUNN: This is true. Kathy, this is Wanda. There are checks next to each one of the listed procedure numbers.

MS. BEHLING: Okay those are actually -- those are little arrows, they are -- and if you click on that

arrow that opens up a dropdown box.

MS. MUNN: Oh, all right.

MS. BEHLING: Okay, so it's not actually a checkmark. That's a dropdown box and in fact I was going to get to that a little bit later as you see on the three tabs at the top we have summary, details and then procedures. And when we enter a new procedure and we're going to be adding findings for new procedures, you first of all enter it into that tab and we'll get to that a little bit later and then that procedure becomes part of that dropdown box. So it makes it a little bit easier. In fact as you're typing the procedure number in there it tries to anticipate what procedure you're going to be -- and it sort of fills out that line for you in advance. But yeah I see on your hard copy here there are some closed items here and I didn't mean to add confusion to this but there should not be any closed items on this first -- this first screen because that include closed issues is not check marked and I do apologize for that confusion. I guess, okay we can move on, and obviously all the way to the right you have your scroll bar and you would just scroll down through there and as you see at the bottom this is -- we're looking at the very first item there is one of two hundred and fourteen -- no, no, no

that's my screen -- is three hundred and seventy-six findings and procedures and procedure type findings that are identified at the bottom of your -- of that first screen. And so if you scroll down you could see each one of those three hundred and seventy-six line items. And if we go on to page two --

MS. MUNN: Before we leave Kathy --

MS. BEHLING: Okay, I'm sorry, go ahead.

MS. MUNN: There under finding number and page number, I'm assuming the page number is the page of what is going to be the new current document, or is it a reference back to the older --

MS. BEHLING: No, this is actually the page number from the hard copy report that we submitted to you.

MS. MUNN: Okay.

MS. BEHLING: Okay. And I should also explain that the finding date here is actually the date of the report that we submitted to you. So in other words our first set report was sent to the Board on January 17, 2005.

MS. MUNN: Right.

MS. BEHLING: So all procedures and findings that were associated -- associated with the first set will have that date in the first column. The second set was June 8, 2006, and the third set was October 29th,

2007, I believe.

MS. MUNN: Right, yeah we agreed that that would be the better way to do it so we could keep track of which set we were --

MS. BEHLING: That's right. That's right. And in fact and I'll get to this also later, we can sort and print by just a date range which is the screen -- which is the selection at the top which will allow us to separate out all of these different sets. And with things such as addendums that we have included such as our PROC-0092 addendum that came in on -- or that we submitted to you I believe on September 20th, 2007. So all of the findings associated with like a PROC-0092 will have that 9-20-2007 date associated with them.

MS. MUNN: Which brings me back to the page number issue.

MS. BEHLING: That page number is the page number in that hard copy document.

MS. MUNN: And are those page numbers not likely to change from time to time as we add new information? No?

MR. HINNEFELD: No --

MS. BEHLING: No --

MS. MUNN: Stu's shaking his head no.

MR. HINNEFELD: It's their published report that they

submitted that's the PDF or hard copy review of the procedures, you know, very first set, the next one was called the second set was called supplemental; it's that hard copy report that they submitted. It's really nothing that we've generated in this workgroup.

MS. MUNN: And we are not likely to be seeing addenda to those reports -- that's my --

MR. HINNEFELD: Addenda would be a new date -- a new dated report and any findings in the addenda then would carry that finding date and so that would essentially be a new product; is that right?

MS. BEHLING: Yes. That's right. Thank you.

MR. HINNEFELD: Sorry, they should do this talking.

MS. BEHLING: No, no, I appreciate it. And --

MR. HINNEFELD: Later on I'm supposed to talk.

DR. MAURO: We weren't sure.

MS. MUNN: We all have to understand this. And so if we had an addenda to say well since we're looking at IG001, if we had an addendum to that then it would appear --

MS. BEHLING: In fact that's a good -- that's a good example. Let's look at IG001, Rev. 1, the very first line. That finding date which is as I said January 17th, 2005, was our first set and we had on page twenty-four of that report it describes our finding

IG00101. Now it just so happens that, that particular finding, the resolution for that finding was that NIOSH was going to revise that -- their implementation guide and when they revised that implementation guide we were going to review that and to ensure that, that finding was resolved in the revision. Now if you go down to the date of 10-29-2007, you scroll down a little bit further, it's actually the last OCAS-IG001 Rev. 2 under the finding number there again we have IG00101 and then that's on page thirty-one of our report submitted on the October 29th and that is a review of that first finding. We reevaluated that finding under our second set -- our third set of procedures. Now I don't anticipate us putting any additional information into our submitted reports like our January 17th report; if anything needs to be carried over it will be picked up in another report most likely. That's at least how I -- I don't see us adding a lot of new information to existing reports that have been published.

MS. MUNN: My concern was being able to easily follow this through as we build a larger and larger library of closed items. And to, one of the advantages I had perceived originally in having this listed as alpha numeric order that would make it easier to pick up

each of the separate findings.

MS. BEHLING: Were you anticipating that our third column, the finding number and the page number would actually be a page number associated with the detailed list? Is that what I'm understanding? In other words are you expecting that the page number would be a page number that we would go to directly in the more detailed individual -- where there's a finding on each individual sheet which is the next sheet I'm going to talk about.

MS. MUNN: John?

DR. MAURO: Yeah, I'd like to help out a little bit. I think what's happening here is we're looking at the colored six page overview of the Access program. And this is really like the table of contents or the scroll up type of form. Now you're posing questions that go into the bowels of the big thick package. So eventually when we get each one of the findings, every single finding associated with every single procedure review has its own page. And in that page is all of the information in a historical sense that has unfolded at each and every workgroup meeting. So the really the depth -- the in-depth details of everything that has transpired is not contained -- you know it's contained deeper into the program one of the -- in

fact if you folks got the four files, the second file that was up there, I think the second or third file was a very large file. That there was one page for every one of the findings and I think the kinds of questions we're talking about now regarding the fine structure of the resolution of the issue that's where it would be contained. Now whether or not you could go -– Kathy, the only question I have is if you wanted to go into that starting with the cover pages are there -- in other words, is this nested where you start with these cover pages, these one through six or one and if you wanted to track into and let's say into some particular issue that -- or finding under a particular procedure is that something that you would -- you could actually go to from this first page, page 1 on the roll up or you don't do that?

MS. BEHLING: Yes.

DR. MAURO: Yes you can?

MS. BEHLING: Yes --

DR. MAURO: Okay.

MS. BEHLING: In other words if we scrolled down to any of these items if we went to the last item that you can view here on your screen and you would highlight that item and then we would -- or just put your cursor let's assume we put our cursor in the last

item on your sheet here which is IG00105, I guess it's on page thirty-two and again this is page thirty-two of our hard copy report when if you put your cursor anywhere in that row and you hit the details form -- okay, yeah, I'm on my -- I'm on my screen here again, okay.

DR. MAURO: So where -- I think some of us are on the screen and some of us are on hard copies.

MS. BEHLING: Yeah, I will pull that screen right up but obviously you're not -- yeah, you're not -- you're not working from that. But when you're on -- in the Access database yeah, you can go -- you can go directly to that detailed stamp and fill in that information. Now with what you're going to be looking at is a PDF file. And I think what Wanda -- okay I'm -- now I'm starting to understand what's going on here. I think what Wanda would prefer and correct me if I'm wrong Wanda, you want that page number in that third column to actually represent the page in the detailed section, that thick section that -- and as you said as things close that may change. So you don't want this page number necessarily to represent the hard copy report that we send to you? Is that correct?

MS. MUNN: I'm just trying to think ahead and I don't

want to complicate things. I may be asking too many details for where we are right now.

DR. MAURO: I --

MR. HINNEFELD: What do you want to accomplish, Wanda, when you're talking about page number or tracking something all the way through and the addendum?

MS. MUNN: I want to be very sure that after -- that because we do so much work after the original report occurs, I want to be sure that I can tell in our roll up where I need to go in the archives to find the current status of that specific item. And, Paul?

DR. ZIEMER: This is Ziemer. I think probably it would help if you identified in this column that it's the page number from the original SEC report -- or SC&A report as opposed to a page number in the roll up documents. Is --

MS. MUNN: Yeah, that really -- I guess you're getting --

DR. ZIEMER: So, the page number here, that's the page number in your report on that review. So if -- it's a page number from SC&A review reporter something to clarify, and then later on I guess you could have a page number in the matrix or however Kathy thought it should be identified.

MS. MUNN: Or addendum --

DR. ZIEMER: But could I ask one other question and sorry I came in late but do we have the interactive Access database available? Is it on the website or is it on the O-Drive?

DR. MAURO: Must be on the O Drive.

MR. HINNEFELD: We got actually PDF first.

DR. ZIEMER: Well the PDF, you can't do anything.

MR. HINNEFELD: Right. That's what I'm saying is I've not seen the actual database.

DR. ZIEMER: I got from Kathy just a Word copy which is not interactive.

MR. HINNEFELD: Right.

MS. MUNN: Yeah, Kathy at this point I think is just trying to explain to the -- how it's going to work. We don't have access to it yet.

MS. BEHLING: Yeah, in fact that was going to be my -- I was going to ask that question as a concluding question. How we're going to -- where we're going to put this information, and give you some of my thoughts. I guess the other thing that I'm thinking here is because I've sorted this summary page by procedure number, when you go to the detail -- when we go to the details list I've also sorted that by procedure number. So if we're on line five -- let's say if we drop down five lines here on our

what I sent to -- or yeah, what I gave you on this summary, we would be at IG001-16 page forty-eight of our SC&A report and page five of our -- of the detailed PDF file that I sent you would represent that particular finding.

DR. MAURO: Could I step back just a bit? When we first initiated this process where we were trying to come up with a table; if you remember one of our workgroup meetings we got up there, we put up a sheet of paper, we started drawing saying is this what you'd like? And we started to zero in on a particular form -- format. But we also realized there's a lot of different ways you might want to cut it because there's lots of information and you'd like to be able to package it many different ways and we realize that right now we might pick this format, might be useful to us but at some time in the future we may want to cut it another way, you know, and look at the data. So what happened was in order to be as flexible as possible given that we're in a situation on how we'd like to package our reports, package our material, we elected to go with the Access database because that allows you to do just about anything you want. Now the question I guess I have now is now that we've

built the Access database, it's off, it's running, we've got it, we've loaded it. It was never my impression that the Board would want to unless they chose to use the Access database. It was really my understanding that all of the data would be accessible by SC&A, would be accessible by NIOSH to load it, to update it because it's a living process every -- just before we come to such meetings.

MS. MUNN: All right.

DR. MAURO: Stu and his folks are going to be loading up data, we're loading up data but in the end we're going to come to the room with a stack of paper, okay? Or on an electronic version to avoid the stack. But it was not I guess my original vision that everyone on the Board would be sitting at the Access machine and doing all the magic that you can do with Access. But if that's what you want we could -- well it's going to be a learning process as you can tell.

MS. MUNN: I don't believe it is the expectation of anyone on this workgroup to be actually manipulating the database themselves.

DR. ZIEMER: I don't think we should have the ability to change anything in the database. That should be reserved for either NIOSH or SC&A but

certainly if you want to click on an item and look at either the history of it or whatever it seems to me you've got to have access otherwise -- Otherwise you don't want to print out every page.

MS. MUNN: No.

MR. ELLIOTT: I think in Access you can affect a read only authorization --

DR. ZIEMER: Yeah.

MR. ELLIOTT:-- versus a read and edit. So maybe you want to -- we could have I don't know maybe Kathy knows how to do this but if not we could have one of our -- we have an Access person too, might help.

DR. ZIEMER: Or at least make it available on the O-Drive or somewhere where we could look at it if we wanted to look at particular -- otherwise there's a lot of sub information that doesn't show up unless you're going to print out all of that which seems to me to me to be --

MR. HINNEFELD: I would think the Board would want to be able to --

DR. MAURO: It's going to take some time; in other words you can tell by the conversation that you know yeah it's like learning some new software. You're going to learn how to navigate

your way through it but it's certainly doable.

DR. ZIEMER: Now you may want to have just a hard copy summary for a public meeting.

MR. HINNEFELD: Right, yeah.

MS. MUNN: My sense is we're getting way ahead of Kathy and that she probably has thought of most of these --

MR. HINNEFELD: Kathy, this is Stu, I have one quick question. When you were talking about finding the detail for a particular finding you said you put the cursor on that row and hit the details button; is that a details button that shows which -- is that a button that I can see on this hard copy?

MS. BEHLING: That's where I'm going next.

MR. HINNEFELD: Okay.

MS. BEHLING: If I can move on then maybe we can address all of these issues at once, but yes in fact page two of what John handed out is the details button.

MR. HINNEFELD: Oh okay, it's a tab. All right.

MS. BEHLING: It's a tab.

MR. HINNEFELD: Perfect.

MS. BEHLING: And so I agree with everything that's been said so far. It was my intention, I

was going to suggest that we would put this database out on something like the O-Drive in the advisory board folder and it's my understanding from the person that developed this database for us he can put out a read only file and he can also put a file out for both SC&A and NIOSH to use and what -- it's my understanding that if we were both be using it at the same time, provided we're not on the same record when we both save that information everything will be captured. However if let's say Stu and I were both in the same record if Stu got into that record first and I went to get into that same record it would tell me there's another user that is making changes to this record and I couldn't make any changes until that was completed. So that's one of the nice aspects I believe with this Access database. And so I definitely think that it would benefit the Board members to be able to look at the Access and that's what I was trying to show you on each of these screens. The summary, you can scroll down that summary, put your cursor on any one of these rows and then when you hit that details screen as you see on page two of what I've sent to you, the details screen is now highlighted and

the screen that we're looking at is all of the information that we wanted to capture here I hope. If there's something we've missed, please let us know. And what is -- what was included in here is again their procedure number and the Rev. numbers, finding and a page number, page number again associated with the hard copy, a rating and then we have, you know SC&A has the checklist and we have the review objectives that means something to us. So they've included for internal use when we initially load this information that we do have the option of putting that review objective in there. However, it does not as you saw come up on your -- on the summary screen, it's not necessarily something that the workgroup felt that they needed to have to sort on. But we did include it just for SC&A's purposes. And then alongside of there you have your procedure number and again your status in this -- in -- at least the one I pulled up it's -- or the one I sent to you is -- is transferred and it's transferred to the global issues portion of our review. Here again we have now our initial finding date, SC&A's finding date and a description of the finding and then NIOSH's

initial response and we have a -- a slot for in -- you know putting in their input. Now at the bottom portion of the screen that you see in blue this shows what transpired at the workgroup meeting and the example I gave you is from our October 2nd workgroup meeting. We have our discussion area and then any directives that were given by the workgroup. Now if there were follow-up's we would -- we could put those in -- an SC&A follow-up or a NIOSH follow-up we have a date and we would write in there what happened as a res -- after that meeting. And if you go down to the bottom right now you'll see one of one. For the next workgroup meeting what -- for the information that we're going to put in for the next workgroup meeting we just either hit that button or type a two in there and then just that blue portion of the screen changes and now we'll enter whatever we talked about in today's meeting and we'll have our workgroup information from today's meeting and so when this actually -- when this particular -- if we were to add a second record to the bottom of this when this gets printed in PDF it would all be on one page but you would just have your first workgroup then

your meeting information, your second workgroup meeting information but on this screen you're only going to see the most current -- you can go back and forth but -- but to get to the -- your -- your next record for the next workgroup meeting you would just select two of two and it could be three of three but when it's printed it should be all printed on one page.

DR. MAURO: Kathy, if I can jump in by way of looking at this for the first time since it's been evolved from the hand drawing on the screen here, I think it --

MS. MUNN: It looks nicer now.

DR. MAURO: It looks nice here doesn't it? But the fundamental theme here is -- and -- and correct me if I'm wrong Kathy is ultimately what we have is for -- for every finding, you know we may have thirty procedures we reviewed in one of these big three ring binders and every procedure has maybe six, seven, eight findings. Well we have built something here that says there's going to be one page dedicated to each finding. So what we're looking at on -- if I'm correct on page two is an example of one procedure, one finding and the fundamental format is in the

upper gray part, that's sort of the stuff that happens before the first workgroup meeting. In other words, you wrote a report -- SC&A wrote a report, in that report it says SC&A finding and there's a date under there, 6-8-2006, that's in the gray area on the left and we write down what our finding is and that just comes right out of the big thick three ring binder report. Then right beneath that, you know after we deliver the hard copy report and we make -- we make the matrix like the old matrix we used to have, we'd have a little column, it's an SC&A finding. But then what happens is we send it off to Stu. Then Stu says yeah, we're going to -- we're going to respond to that and then the next thing, right underneath it you see it says on the left-hand side in the gray region, NIOSH and there's a response and there's a date, well that's when Stu filled in his information. And originally in the old one remember that was in there. But then -- and then we really have sort of set the base, all right, now we're off and running. We've got ourselves our finding, we've got SC&A's finding, we've got NIOSH's response. Then we have our first meeting, okay. And the whole purpose for

doing it this way is that one of the things that we were concerned about at the last meeting when we talked about this is we were not able to track things by workgroup meetings. Now what we have is the blue section and that really is the new change when you say what are we doing differently now by way of packaging information, and that blue section is just going to keep stacking up. If we have five meetings there's going to be a workgroup meeting date. There's going to be one for this meeting, you know, and there will be one for the next meeting. So for every single issue now that's why things are so bulky, every single issue is going to have this historical stack of workgroup meetings that just keep extending until we reach the point where in the upper right-hand corner it says closed and that's it. And then -- but that -- that becomes a record, a historical record of everything that ever happened to get to the point where we closed that issue.

DR. WADE: Towards -- towards the issue of everything John, let's say that on an issue NIOSH writes a white paper and then SC&A critiques that white paper. Now we have intellectual information. How is that captured? Where is

that --

DR. MAURO: I have to say -- I don't know. Kathy, did you give any thought to that or how that would be done if we have like a ten page white paper that's either issued by NIOSH or by us dealing with one particular issue, where is that captured?

MS. BEHLING: Well the actual document itself I don't know where we would capture that. That's -- we can discuss that. Where I would enter it into this database is in that blue section let's say SC&A was asked -- was tasked with writing a white paper, I would put the date of our white paper and I would write in the portion alongside of it, SC&A submitted a white paper and give the file name, something like that. Now for actually attaching the file to this record I hadn't given that a lot of thought.

DR. WADE: One of the powers of a database like this is that you can have those active links.

MS. BEHLING: Yes.

DR. WADE: I think we --

DR. ZIEMER: You can do exactly that.

DR. MAURO: We could -- click on it and then bring you to it.

DR. WADE: So I mean that's some -- to complete this I think that's something that you need to give some thought to.

MS. BEHLING: Okay, that's a very good idea.

DR. WADE: One of the trivial questions from an old life of my -- from a license point of view, who will have the license that will cover the people that use this? Do we do that? Does SC&A do that? Have we thought through that?

MR. ELLIOTT: We have an Access license.

MR. HINNEFELD: Most users of Office have Access.

DR. ZIEMER: You -- you have to have the Access program on your computer to use it I believe. And that's --

DR. WADE: So the individual user would --

DR. ZIEMER: That's like Microsoft Word, you either buy it or you get it under some license.

DR. WADE: So the individual user would come with a licensed version of the program?

MR. ELLIOTT: Yeah.

MR. HINNEFELD: Yeah.

DR. ZIEMER: We may have to provide the license version for the Board members.

DR. WADE: Right, we might have to do that but we can do that offline. I just wanted to make sure

how we --

MR. ELLIOTT: This is a very powerful software, it's actually --

MR. PRESLEY: How big is this? Do I really want this on my computer?

MR. ELLIOTT: Well it -- you know, it's as big as it'll get. It's as big as you'll build it. But it's a very powerful software program and it was the same software program we used to start our NOCTS tracking system which we -- you're able to then convert into SQL if you want.

DR. MAURO: No worries.

DR. ZIEMER: It's not big compared to pictures.

MR. ELLIOTT: No.

MS. MUNN: But the -- the -- I -- I in the past I personally have avoided Access because for a couple of reasons. A few years ago it had a large number of bugs and I just stayed away from it. But it's a -- obviously going to be a powerful tool. Frankly when we first looked at the pretty pictures that John and Arjun had drawn for us there was some concern with respect to how this material was going to stack up on the page. I certainly was concerned about how many pages we were going to have regarding each individual

item. But now that I see it, this second page here I can see that having each date's description of what transpired will be -- it's very easy to get to exactly where you want it to be.

DR. MAURO: The reason we came to this -- to this approach was we were doing things in landscape. And the columns were getting lots and lots of columns.

MS. MUNN: Out of --

DR. MAURO: And one column would end up having four pages going like this, you know, so this is the way to avoid that, you know.

MS. MUNN: Right.

DR. MAURO: So now we're in portrait when we get to the workgroup meetings.

MS. MUNN: Let's -- unless someone else has something really cogent let's let Kathy go on with where we are here.

MS. BEHLING: Okay. We covered the two main screens now and if you go to page three this is the third tab that I mentioned earlier, the procedures tab. And this is simply -- it's -- it's a means of entering a new procedure number. This just identifies -- it doesn't identify the

finding, it is just identifies the procedure number in order to make it available to the drop down box, and as you can see here I think there's about ninety-five procedures that have been added and before it becomes available on that dropdown box either in the summary screen or the details screen it has to be added here. So this is something that's more of an internal -- it just -- it would be most likely SC&A that would be using this screen but I just wanted to make you aware of what that tab represented.

And if we go on then to page four, this is actually how I generated the other documents that I sent to you, the PDF files. As you see in the top -- at the top in the center there's a print -- a gray print summary button and that obviously if I select that button without a checkmark in the include closed items -- include closed items I will get everything in that roll up table or that summary table and it -- when I -- it will open up that file for me and then I print that to a PDF file. Same with the gray button alongside of it, print details. Now that's a print details all button meaning I'll either print all of the details that are out there that are still open,

transferred or in abeyance or if I check mark that include closed items I can print all details including the closed items.

MR. MARSCHKE: Kathy going back -- Kathy this is Steve Marschke. Going back to the first sheet where we had that question about the closed items.

MS. BEHLING: Yes.

MR. MARSCHKE: This include closed items check mark that doesn't -- I believe that, that only -- it has functions on the print and not on what is displayed on the screen. Is that correct?

MS. BEHLING: No.

MR. MARSCHKE: No?

MS. BEHLING: It is supposed to do both.

MR. MARSCHKE: Oh, okay.

MS. BEHLING: It is supposed to do both. Include closed -- closed issues is supposed to both -- because in fact as I said I'm looking at it on the screen and it -- in my summary sheet I'm not seeing any closed items but when I check mark that box the closed items open up. But they're not there when I uncheck that box. I don't know how that first screen -- so no, it functions both on -- on the screen and what is being printed.

MR. MARSCHKE: Okay.
MS. BEHLING: Okay. If we go -- and if we move on then to page five --
DR. ZIEMER: Question.
MS. BEHLING: -- to the last page here -- oh no --
MS. MUNN: Kathy, wait a minute, there's a question.
MS. BEHLING: Oh I'm sorry, go ahead.
DR. ZIEMER: Just a question. If you do a printout does it automatically assign a current date to the printout so that you know how current it is?
MS. BEHLING: That's -- yes, in fact I'm glad you asked that question. When you select that gray button that says print summary or print details the first thing that comes up on your Access screen is it says footnote and it allows you in fact on the PDF files that I sent you, you'll see a footnote, you'll see the page numbers, that's automatic, but you'll see a footnote where I put SC&A dash December 7th 2007. So it allows you to put a footnote in so that we can put in the date that we've made -- that we've -- we've created that -- that print.

MR. HINNEFELD: So it's not automatic? It's not automatic but it's possible?

MS. BEHLING: It's not automatic but it allows you to put that footnote in; yes.

DR. MAURO: So Kathy, does that mean that if I'm sitting at my machine and I decide to print out a hard copy to using this tool it -- I would -- I'd have the choice of giving it any date I want. Now everyone using this can do it and put in there whatever date I -- eventually though --

DR. ZIEMER: We don't want them to be able to do that.

DR. MAURO: Right, that's where I'm going. Yeah.

MS. BEHLING: That's -- that's correct. See again and I -- I agree with you John. I envisioned this Access database to just be something used by Stu and myself or you know -- you know NIOSH whoever's going to input the data and SC&A whoever's going to input the data and not everyone out there making changes. But you're -- you're correct, we can -- we could probably try to automate that based on when you print that it -- it automatically prints the -- the current date but what I was trying to do was make it very clear for the workgroup to

understand this is the last time that SC&A updated this database or it's the last time that NIOSH updated this database. We can make any changes you'd like there but currently it is something that -- it -- like I said a footnote screen comes up, you type in like I did SC&A and the date and now you know that this is the last time that SC&A updated this database.

MS. MUNN: But wouldn't you -- wouldn't you want that more on the details sheet rather than on the summary sheet?

MS. BEHLING: It will be on both. If I hit the print summary I'll get a footnote screen and I can put my date on there and it'll be at the bottom of each page. If I hit the print detail button it -- and I put that same footnote in it will show up on each page of the detailed report.

MS. MUNN: Right. Okay actually I don't see any difference between page one and page four that we have in our printout except the check and the include closed issues. Yeah, it looks to me like the same thing.

DR. BRANCHE: It is.

MS. BEHLING: Oh, it is.

MS. MUNN: Very good. Just checking.

MS. BEHLING: Yeah, that is the same thing. All I was trying -- I guess on mine I circled the print button just to -- and I -- in that one there is a check mark under the include closed issues on page four.

MS. MUNN: Correct. Right.

MS. BEHLING: And so that does show you the closed items but unfortunately page four --

(Sound on telephone connection)

MS. MUNN: Oh my.

DR. BRANCHE: For those of you who are -- this is Christine Branche -- for those of you who are not speaking if you had the opportunity -- ability to mute your phone it would be very helpful.

DR. WADE: Whatever that was. Poor baby.

DR. BRANCHE: This is Christine, I just -- as -- as a -- as an observer of this discussion, is there some utility in having the fixed preparation date that either NIOSH or SC&A would have full up only -- only opportunity to alter versus a printing date and have two dates and you would say the print date?

DR. ZIEMER: I believe there is because each of the items could have different dates on them depending on when NIOSH or SC&A dealt with those

items.

MS. MUNN: Yeah.

DR. ZIEMER: You don't want a whole bunch of different dates on your printout. I mean, in the columns you might have that but seems to me the printout date is still important so that you know --

DR. BRANCHE: So in other words whenever -- whatever date is on the computer of the person that printed it that would -- that would happen but it would -- but would be unaltered except for by SC&A or NIOSH staff would be the date that Kathy already has that she provided in what we printed out in the -- in the --

DR. MAURO: It seems to be -- my main concern has been in the past is when we'd get together and we'd have these hard copies and -- and -- and we're into our third or fourth workgroup meeting where sometimes we don't -- we didn't always have the same version.

DR. ZIEMER: Same version.

DR. MAURO: We had a different date, and the only way we knew whether or not we were all on the same page is by looking at the date. So what we want to do is create a tool so that when we do

sit around the table and we are all looking at a screen we could very quickly determine are we all on the same page working from the same form with the same date. Now I think that maybe the trick is you know before the meeting when -- when NIOSH and SC&A are assembling this and making sure it's all filled out as current as we could make it just like last week and then we show up at this meeting the key would be to make sure that -- that we date it but the -- the date would be such that it would be indicative to know for sure that everyone is looking at the same thing and that date becomes the form that we work from for this workgroup meeting.

MR. HINNEFELD: It's probably a good idea to have an official print --

DR. MAURO: Yes.

MR. HINNEFELD: -- for the work for use at the work group. We'll just decide you know between us.

DR. BRANCHE: And you can date that.

DR. MAURO: Date that.

MR. HINNEFELD: We'll print and date on an agreed to date.

DR. MAURO: Right.

MR. HINNEFELD: And then that will be the version that will be talked about at the next workgroup.
DR. MAURO: Do you envision that we would be sitting with the hundred and fifty pages of these forms?
MR. HINNEFELD: Oh I would hope not. I would hope we would print anything that's got you know information added to it.
DR. MAURO: Okay, now what -- what I'm getting at is, are we going to be working from hard copy or you think we'll all be sitting at our terminal?
MS. MUNN: I would suggest that we consider printing only the --
DR. MAURO: Open items.
MS. MUNN: Printing only open items or alternatively printing only the rollup.
DR. MAURO: The rollup, okay.
MS. MUNN: If we know what version of the rollup we're dealing from then we're working with the knowledge that anything that has been changed is shown to us in the final version of the workup -- the rollup that we're using that day.
DR. BRANCHE: That issue is the -- I'm sorry again, but that issue is absolved if the only people who have the opportunity to alter the date

is NIOSH or SC&A.

MS. MUNN: Correct.

DR. MAURO: And we're working on it the week before so --

DR. BRANCHE: Everybody only has a read-only -- a read-only opportunity.

MS. HOWELL: But can't you print?

DR. MAURO: Again?

MS. HOWELL: I just am wondering if the Board members print their own copies and they don't have the opportunity -- you still need an automatic date stamp to show up because you're still going to have multiple versions.

MR. MARSCHKE: You need a date stamp of the -- of the -- of the date of the -- of the Access file, the data file. I think that's more important actually than the date that you printed it on. You need a -- you need to print out the date stamp of the data file so that you know that you're working from the same data file because I can print it on Tuesday and somebody else can print it on Monday but if they're printing from the same data file they should be identical. So really the date that you print it on really doesn't matter but it's the date that -- of the -

- of the -- of the data file that is -- that is -- that should show up somewheres (sic) on the hard copy.

DR. WADE: And that date should represent the date of the last change.

(multiple speakers)

DR. BRANCHE: But that currently is what has been organized.

DR. MAURO: That's what we're doing.

DR. WADE: That's all you really need is the date of the last change if people could print that date if you want and print.

MS. BEHLING: We can automate that.

MS. MUNN: That would be great.

MS. BEHLING: Okay.

MS. MUNN: Thanks.

MS. BEHLING: Okay.

MS. MUNN: Kathy?

MS. BEHLING: All right and I guess on page five what I was trying to show you here is the -- the gray button at the top again, this is a print button, details for selected procedures. Again underneath there is a drop down box and it identifies all of your procedures and if you only want to select the findings or the open findings

or open and closed findings if you check mark that include closed issues for one specific procedure that button gives you that option. And then on my last page, page six, same type of thing but this time the last gray button on the right is details for selected finding date and I did this again because I wanted to be able to select January 17, 2005, so if we only want to look at what's remaining in the first set of procedures that we've -- that we looked at or what is -- like one of the -- one of the files that I printed or I submitted to you for this meeting was what are the findings associated with PROC-92. And so this button gave me that option to just select procedures and I'm -- I'm showing you this because these are the options we have available, these are not the only options and I wanted you to have some discussion as to other things that we may want to include that we might want to sort on. Obviously I did hear we want to be able to include only open items so and actually I believe at this point I have only asked our Access person to exclude closed items. I didn't ask him to include items maybe that have been transferred or in abeyance and I will have

to ask him to specifically have us be able to include only possibly only open items so that we can just deal with those during our workgroup meeting.

MS. MUNN: Now but be aware abeyance also is open.

MS. BEHLING: Yes.

DR. MAURO: Kathy, could you again refresh at least my memory the distinction between an item being open and active and being open and in abeyance?

MS. BEHLING: Okay, and there are also different forms of open which I guess in this version I didn't have the time to put all of those in. But first of all there's open and what we had discussed and Wanda correct me if I'm wrong but open means the item has not been discussed yet. It is a finding that we submitted let's say a third set finding that we haven't had any discussion on yet, that's obviously an open item. If it's open and in progress it means that we have had a workgroup meeting on this topic, we've had some discussion but the issue is not resolved. In abeyance is an issue that is actually been -- we've been through the entire

resolution process and the resolution is that NIOSH is going to agree to make a change to that procedure and in some future revision of that particular -- that particular procedure they're going to incorporate the finding, they're going change -- make that change to that procedure to incorporate our finding. So it's actually an issue that is by -- by what we're looking at here we've resolved it but it's not going to be completely resolved until NIOSH issues a new procedure, a new version of a procedure. That's in abeyance.

MS. MUNN: That's approximately what we discussed at our last meeting, yes.

MS. BEHLING: Correct. And then obviously closed is an issue that maybe SC&A agrees with NIOSH's response and the Board agrees with -- there's an agreement across the Board and that's a closed item. Now the last status is also the transferred status meaning that we -- we can transfer something maybe to a site profile or we can transfer it to global issues. So those are the items that you can -- that you might see in that status column. The one last item which I don't think we're going to see a lot of these

when we get to the third set, this second set was a little bit unique but in some cases we recognize as we look down through maybe a list of fifteen findings that many of them are related and if we resolve finding one we'll resolve the next five findings. So what we'll do in the status of these additional five findings is say we'll -- addressed in finding 001, the finding number in 001. So those are the types of things that you'll see in the status column. Are we in agreement with that, and I thought that is what we --

MS. MUNN: Yeah, yeah, that's essentially what we'd agreed to. Paul?

DR. ZIEMER: I have another question Kathy or anyone at the table could perhaps address. Suppose we have findings from different procedures that deal with a particular thing, let's say it's breathing rates for construction workers or something and you have several different procedures where that has arisen as a finding, do we have the ability to sort not only by procedure title but by the nature of the finding, for example every time that arose could we -- can we sort by that to see if it's always

handled in the same manner or is that getting to be too much detail?

MS. BEHLING: We -- that is not built into our current sort because if you go back to page two into the details screen that is -- it would be in a paragraph type form here. Now I would assume you could sort on specific words within that detailed screen I can -- I can check on that.

DR. ZIEMER: Well for example tritium calculations or something like that.

MS. BEHLING: Yes.

DR. ZIEMER: Or suppose that issue arose in several different procedures. Maybe -- maybe it wouldn't but I think it could or some of these could.

DR. MAURO: Well likely between the procedures and a site profile and a real case.

DR. ZIEMER: Yeah.

DR. MAURO: We're going to -- because we're going to see a tritium problem in all these different places. What you described certainly be valuable I have to say it's going to be --

DR. ZIEMER: Is that a -- but that may only be a word search on the finding. Every time tritium comes up show us what it was.

MS. MUNN: That sounds like a simple word search. You'd have to sort through after you've --
DR. ZIEMER: Well I think Access has that capability; I'm sort of asking whether it does. Kathy do you know if it --
MS. BEHLING: I don't know if it does, I believe it --
DR. ZIEMER: Look at all the findings dealing with neutrons.
DR. MAURO: Has the word neutron in it.
DR. ZIEMER: Or something like that. Do we have that ability?
MS. BEHLING: I believe that we -- that we could do that. Again, I'm not the expert on that -- on Access but I could talk to the person with SC&A that -- that is an expert on it. But I would imagine if we went into our details form we could do a sort on specific words.
MS. MUNN: There -- there is an icon for search showing on the -- on the bar.
DR. MAURO: That would only occur -- let me just point something out that might be important. Remember that this is the Access database that deals with Task Three.
MS. MUNN: Yes.

DR. MAURO: Am I correct in what I heard is that let's say there's tritium issue that came up as something on some other site profile.

DR. ZIEMER: Well right now I'm just -- other procedures --

DR. MAURO: Only within its -- okay, yeah.

DR. ZIEMER: -- but yeah. But ultimately it might be --

DR. MAURO: Okay.

MS. BEHLING: Yeah, John he's just assu -- he's saying that there could be like the inhalation issue associated with several procedures.

DR. MAURO: Right. Sure.

MS. BEHLING: And we want to be sure that we've handled all of them consistently.

DR. MAURO: Okay.

MS. MUNN: But a simple word search would pull all of those items up?

DR. ZIEMER: Seems to me it would, yeah.

MS. MUNN: Yeah. I can't see why not.

MS. BEHLING: Yeah, I -- I am sure that we can do that. I will talk to our Access person. So I guess that -- that summarizes and like I said I just wanted to give you a visual understanding of the database and I'm glad I've -- we've -- we've

walked through this. If you all are going to want a -- a -- access to this information and you're going to want to as I said if you went back to that summary sheet and you said where are we on an open item in IG001 you just click on that item and then open up your details button and it will give you all of those details. I certainly think that would be worthwhile for you -- for you to see and you could have a user, you know, user only type of format that we could make available to you on the O drive but when we get to that point if -- if anyone wants a little bit more detailed demonstration of this we can -- we can obviously do that also. But based on what you see do you have any other questions? Are there any other ways that you'd like to sort the data? Do you want to capture any additional data?

MR. MARSCHKE: Kathy, this is Steve Marschke again. I have a question on the transferred category. If I transfer a finding, say I transferred a finding to -- from -- from OTIB 4, an OTIB 4 finding to OTIB 52, how does OTIB 52 know that it's got a new finding?

MS. BEHLING: Well --

MR. MARSCHKE: How does OTIB 52 receive that transfer?

MS. BEHLING: Well what we've done in the past with the let's say the global issues is at our last meeting again there was the issue of I -- I believe it was the inhalation discussion on -- and we wanted to ensure that that was going to be part of the global issues package and John Mauro as part of the follow-up action talked to Jim Neton and said we're transferring this to global issues and it became on global issues issue of listing and the other thing that I have done and you're asking an excellent question and this is a question that comes up all the time on how do we ensure that nothing falls through the cracks. One of the issues that we discussed under one of the procedures I guess that was a note in my dose reconstruction. I actually call Joe Fitzgerald who takes care of the site profile task and I ensure that he now has this finding and it becomes a finding under lets say a Y-12 issue and when they discuss -- when they resolved the remaining open issues under the Y-12 site profile he includes it there and so on my details sheet I would indicate that I have called and talked to

such and such a person and to ensure that this finding was transferred to something else or to some other task. I don't know if that is good enough or not.

MR. HINNEFELD: I think, Steve, your question about transferring from you know one procedure to another though I think those would be indicated rather than transferred it would be being addressed by such and such find so as long as it's within the procedures of Task Three it wouldn't be called a transfer. The transfer to outside would be the question, make sure it's --

MS. BEHLING: That's correct.

DR. MAURO: Well let me -- the example that Kathy used is a good one. That at the last meeting a question came up regarding inhalation and yes after that meeting I had an action item to call Jim, I called Jim, Jim said yes, it's in -- it's part of the global issue along with the oro-nasal breathing and my intent was to report that back to the meeting today. And what would happen then it would go into the discussion section that's going to go into the next round. So -- so it's a mechanical -- it is not a very sophisticated approach.

MR. MARSCHKE: Right.
DR. MAURO: I just report back and if we're -- you know we're attentive I will make sure that we get those words in the write up but that's it. There's your wink. I wrote it down here and later on someone wants to say well this actually happened, then you got to call Jim again.
MR. MARSCHKE: Right.
DR. MAURO: But that -- it's not being automated where all of a sudden it pops up on Jim's screen, you know what I mean?
MR. HINNEFELD: Right, right.
MS. BEHLING: And Steve, Stu is correct. Anything that stays in Task Three in the procedures review will just have in the status -- the status column addressed under finding such and such so -- so to ensure that it's staying within Task Three.
MR. MARSCHKE: Okay.
DR. MAURO: You know as long as we're going to operate in that mode what this means is that we're going to have to be especially attentive when we fill in the discussion section where -- where you know, what how -- you know to something that's been transferred, it's important that in

that little box it says discussion it's been transferred to this other place and these are the action items that ought to be taken. So at least we have a record somewhere. But you're right; it would be nice to have something a little more automated, but I think we've got to be able to walk before we can run. That's pretty -- that gets pretty fancy when you start linking to other databases.

MS. BEHLING: If the other tasks have an Access database like this I guess we could --

DR. MAURO: Yeah, yeah, but --

MS. BEHLING: This is a first attempt at this. Any other questions or --

MS. MUNN: One other suggestion, Kathy.

MS. BEHLING: Yes.

MS. MUNN: Larry and I were looking at the title of -- of our database here and we're wondering if perhaps the title that you have on Access database screens that we were looking at should read something other than NIOSH Issues Tracking Database. It is an ABRWH procedures working group tracking database actually.

MS. BEHLING: Yes.

MS. MUNN: And perhaps that designation might be

more appropriate, especially in light of the possibility that this process if it works well for us might end up being taken up by others in some other format or under some other title. Just for the current moment unless someone has real reservations about that it seems to me that better recognition would be ABRWH Procedures.

DR. ZIEMER: Yeah, or Procedures Review Database or something like that.

MS. BEHLING: I agree, okay, that's -- I can easily make that change.

MS. MUNN: All righty.

MS. BEHLING: Yes.

MS. MUNN: Any other comments with respect to this?

MR. ELLIOTT: I think I would make a suggestion along those lines that there's great utility here in this -- this database that other working groups might you know latch onto and say hey, here's a great way to keep track of our work better than maybe the matrices that we're currently using and if you change these titles the way Wanda has suggested that opens it up to deliver an opportunity to the other working groups a subcommittee on dose reconstruction

reviews, the board itself.

MS. BEHLING: Yes.

DR. MAKHIJANI: If I might add to that also you know we've had a little bit of complicated tracking for site profile databases that transfer over into SEC issues, kind of -- we have to do a lot of juggling to keep track of going through the way we have gone through the matrices. This could make that easy because we have a site profile tracking base and -- database and at a certain point we see a designation that it's being transferred to SEC work.

DR. ZIEMER: Dose reconstruction matrices can do this same thing.

MR. ELLIOTT: It's a great way to sort out the site profile specific issues from the SEC related issues and track them separately.

DR. MAKHIJANI: Now what I'm going to do is handprint it. I'm going to make a separate matrix for SEC issues extracting from everything. And we can do that; I think it will be cleaner than what we did in Rocky Flats where we were going through a whole matrix every time.

MR. ELLIOTT: Yeah.

DR. MAKHIJANI: But this would help that.

DR. MAURO: And interesting that would make it a forcing function for dealing with. There's always been this little ambiguity on is it a site profile issue or is it an SEC issue. Granted there -- there are lots of different opinions on that but this would force us to have to come to grips with that and ask where would we drop this one.

DR. ZIEMER: I'm wondering if we're at a point in sort of the maturity of this where at least the concept could be presented to the Board maybe as part of Wanda's report and maybe Kathy could make the presentation but to show the utility of this approach and suggest that other working groups consider adopting a similar format.

DR. WADE: And if they were to want to do that what would they do, contact Kathy?

DR. MAURO: Yeah we have our -- Kathy being the first member --

DR. WADE: Point person.

DR. MAURO: Went through the hard knocks of putting it out. I think that she's -- she can move on to the next one. Obviously the next easiest one would be the one that Kathy is running on the dose reconstructions.

MS. BEHLING: Yeah.
DR. ZIEMER: See this is the matrix resolution process now.
DR. WADE: Yeah I mean this obviously has good utility. Obviously it will expand in its use; we just need to plan for that and make sure we have the resources available to do that.
DR. MAURO: Yeah, that -- this turned out to be a bit more resource intensive than we thought it would be as everything else.
DR. ZIEMER: Once -- Once the model's in place --
DR. MAURO: Right, that's right.
DR. ZIEMER: I think you can adopt it pretty easily.
DR. MAURO: Yeah, no I agree, it just was getting from the drawing on a piece of paper.
DR. WADE: But the maintenance of these things will become something that has to be resourced. I think we can do it.
DR. ZIEMER: But we're maintaining the matrices anyway and in some cases where it's more difficult.
DR. MAURO: I think once we get through the transition --
DR. ZIEMER: It looks to me like it would be much

more efficient.

DR. MAURO: Yeah, I agree with that.

MS. MUNN: You're one step ahead of me, Paul. I will start --

DR. ZIEMER: Oh, sorry.

MS. MUNN: No, that's quite all right. I was not quite sure that we were quite at the point where we wanted to make a very significant presentation to the full Board. I -- it would be nice to see the full set of -- of notebooks and full set of documents once before we made much of a presentation of it. I think I would like the full Board to know where we're going with this but perhaps I'm being just a little too conservative if we're really ready for it.

DR. ZIEMER: January may be too soon but if we do it say at the next meeting after that then I could foresee having it done online where she could put it on the screen and do the (indiscernible) and show how the pages came up and so on.

MS. MUNN: I can -- I would anticipate that -- that the Amarillo meeting would be a very good time to do that. But I certainly would like to report to the Board, the full Board, what we're

working on and have a brief -- a brief once through of what we think it's going to look like. Kathy, would that be a possibility for you for the January meeting?

MS. BEHLING: That shouldn't be a problem. In fact I believe that by the January meeting we will have everything updated from the third set put into this database and I will go back and fine tune some of the first and second set information and any changes that we want to make will definitely be made on this database by our expert. Believe it or not the individual that put all this together for me and -- and we -- we had many renditions of this, we went back and forth many times, he did all this under forty hours so he's very, very good at this and he does this type of thing in his sleep and so I don't think there will be a problem having everything, pretty much everything in good order by the January meeting.

MS. MUNN: Good, if we could -- we could anticipate perhaps a -- a five or ten minute -- a ten minute presentation with some Q and A time at the January meeting and then a full presentation of this is what the whole thing's going to look

like in Amarillo, would that be --

MS. BEHLING: That's fine.

MS. MUNN: Is that amenable with the other members of the work group?

MS. BEHLING: Yeah.

DR. WADE: We would do this as part of your presentation with Kathy then speaking to the workgroup update?

MS. MUNN: Yes. Fine. That's a plan.

MS. BEHLING: Okay.

MS. MUNN: Then --

MR. HINNEFELD: Stu Hinnefeld, I have just a logistics question now. Have we decided where -- shall we have them put this on the O drive? I think that would be a convenient place. And so whether it's going to be a read-only or whatever we can work out with Kathy and then if it's a read-only and it goes on the O or --

DR. MAURO: Where else would it be, I mean I think --

MR. HINNEFELD: Yeah, I mean that's -- I think it's got to go there.

MS. MUNN: Yeah, I don't know where --

DR. BRANCHE: This is Christine. The only other option is we're trying to go -- Zaida may have

already sent you a message, the Board members a message, but we're trying more and more to go to a paperless system since so many of you bring your laptops and so she's preparing flash drives for you so there's an opportunity that at least for that meeting to have it available for her to have on the flash drive as well 'cause we're trying -- to all those big books you all bring your laptops so that you know we don't have to kill a tree. So there's another opportunity there as well.

MR. HINNEFELD: Well Kathy you and I can work out how I'll -- if this is going to be read-only or will I have a rights to read to write to it or something like that 'cause I'll need to use -- I want to use the official one, there should be an official one.

MS. BEHLING: Yes, there will be. And yeah, we'll work together on that. In fact I'll have to give all that -- those files to you to update to put that onto the O drive.

MR. HINNEFELD: Yeah, okay. All right, just let me know how it's going to work.

MS. BEHLING: Okay.

MS. MUNN: Okay. So that's an action item,

right?

DR. BRANCHE: So Wanda you want to make a full presentation about the new matrix at the Amarillo meeting?

MS. MUNN: Yes, uh-huh. All right. I had hoped that by this time we'd be into the other portions of those four matrices that had been sent out to us earlier rather than just these database tracking cover sheets. We all received those late last week or over the weekend I guess and there is an enormous amount of information in them but it's very good. Thank you again Kathy for getting these detail sheets to us so that we could have an opportunity to see what they really would look like.

MS. BEHLING: You're welcome.

DR. MAKHIJANI: Kathy, could you email that to me? I'm not able to locate my copy right now.

MS. BEHLING: Yes, I will, Arjun.

DR. MAKHIJANI: Thank you.

MS. MUNN: So one thing that was striking as I was going through it is how clearly we have followed our original plan to try to address the most pressing issues first. When we see the material laid out in this format the number of

times that we see the issue was not discussed really jumps out at us. I don't know that we are at a point quite yet where we can revise our start of standing process of trying to address the most pressing issues in a priority fashion. But before very long as we work in this format it appears that we are going to have to come to grips with when do we address what we have designated as slightly less pressing items because we have such a large number of them that are still in the not discussed category. Does anyone have any specific comments that they want to make with respect to either the format or the content of the format of these four sets that were provided to us?

MR. HINNEFELD: Well I have a specific comment about the file that's called second set open items, the -- discussion -- the workgroup discussion on PR007 is actually the workgroup discussion we held on OCAS TIB 007, PR007 has to do with DR review. PR007 and 005 are somewhat -- somewhat administrative descriptions of how we can A, how we can best assess and B, how -- how -- what do we do when we review dose reconstructions. So we've not discussed those

yet and I believe I do have some initial responses that were not available at the 10-2 meeting that I sent out before the last teleconference meeting that I could clip and put on here, you know once I have the database I can clip them on here for initial responses. But so just as a comment though I was looking through that and I said those responses don't meet the findings and I realized though that was TIB7 responses. So I can -- I can take care of that once the file is updated.

DR. MAURO: There's going to be populating -- populating the database.

MR. HINNEFELD: Yeah.

DR. MAURO: In a way that everyone you and SC&A -- I mean yes this captures. First of all it's factual and correct.

MR. HINNEFELD: Right.

DR. MAURO: And does it capture what was discussed adequately. But that's true whether we're doing it on a database or we're doing it on hard copy.

MR. HINNEFELD: Right, right, right.

MS. MUNN: That's the kind of material I hope we'll have an opportunity to address between now

and the Amarillo meeting so that when we do produce a document for the entire Board to see we'll be fairly comfortable with how the information is presented and that it's presented accurately in the right place. Any other commentary? I will assume that Stu, you'll work with SC&A to identify those?

MR. HINNEFELD: Well I can just change it. I mean once I get the data files from the Access data files I'll just change them because (indiscernible). And actually I think all we've provided for five and seven are initial responses; we have had no discussions, I believe that's true.

MS. MUNN: All right.

DR. ZIEMER: Could you identify the four documents? The first one was the second set, is that the twenty-two page document, the PDF file?

MS. MUNN: Yes.

DR. ZIEMER: Okay and what was the second one?

MS. MUNN: And the second one was the PROC-92 format to be formatted. There you are. The next one was the issues tracking system, the rollup of all items and the other one --

DR. ZIEMER: You're talking about 90-02 or --

MS. MUNN: No.

DR. ZIEMER: Or 92?

MS. MUNN: We're talking about 92.

DR. MAURO: Supposed to be a close out.

MR. HINNEFELD: It's a -- It's an Adobe PROC-0092.

MR. ELLIOTT: Eight pages.

MS. MUNN: Eight pages will be -- they were all sent the same time and we'll be addressing that particular segment of course in greater detail after lunch. All right.

NIOSH – GLOBAL ISSUES REPORT

Let's move on to our next item. We're going to get a report on global issues and where we are with those.

MR. HINNEFELD: Yeah, this is Stu, I believe we were asked to describe how we're keeping track of global issues.

MS. MUNN: Yes and --

MR. HINNEFELD: So, so far we have -- have a list, a meet and approve list. And what I'm handing around is a one page -- it's a one page file and this is actually a Microsoft project because it's something we use for other purposes, we just put it on there. It could be on a PB, we

don't have -- we don't –- we really use Access, our TST guy is a SQL guy and so we would do it in SQL if you went to a database. But in this fashion the advantage of projects is you can list under your tasks is and each of these -- not the blue ones are sort of categories but the black numbers are tasks. You can list subtasks under each of those, first specify how you're going to do it. Some portion of this will be to put a responsible person on each one. Jim has his -- he has his list of responsible people that he has not shared with me yet so I'm hoping I'm not on it. So I say responsible person, I mean the health physicist who is probably going to lead the effort. And what we'll have to end up with is then a -- some sort of technical document whether we call it a technical information bulletin or invent some new name because it doesn't really tell anybody how to do stuff, it just provides the technical background for why we do something a certain way. So there will be a technical document prepared for each of these. So that is the tracking mechanism we have so far. And -- and you can also put in days and schedules, you know due dates and completion

dates. So it's -- it's a project management tool really all the scheduling type of things. The issue I was supposed to talk about I believe was oronasal breathing and the breathing rates which again Jim has been involved with and has talked to John about. Jim did present this at the Naperville meeting, he made a presentation on the science issue. I had forgotten that at our last meeting because I missed quite a lot of the Naperville meeting because I was on other business. But the -- but the rest -- the presentation briefly is that for dose reconstructions were those dose -- internal doses calculated from bioassay. The oronasal breathing becomes not much of a factor because if you might -- you'd have a greater deposition which then accounts for better urine samples and so it comes -- comes out in the wash. So it's not much of a factor on a bioassay. The issue comes in on a -- on a air sampling approach and what Jim presented was air sampling populations have large GSB's and we use high percentiles like the ninety-fifth percentile on the -- on -- on the -- on the distribution and for that reason the uncertainty that's associated with the breathing technique of

the individual is essentially dwarfed by this larger uncertainty in which your ninety-five percentile of the air sample distribution you would count it sufficiently for. That was his presentation. Mark asked the question about well you've shown us the Simonds Saw data, air sampling data which clearly has a very large geometric standard deviation, is that really true universally. And so that work has yet to be done. And this will all be published in a document.

DR. MAURO: And what might be helpful is that I've been reviewing TBD6000, 6001, both of which deal with generic reviews, large, vast amounts of data related to the AWE facilities, the processing and the working. And I noticed in there that an attempt was made to capture the literature on lots of facilities and the way in which the data are summarized are EPN per cubic meter with the geometric -- the geometric standard deviation. So I'm just offering up one place that's already been done to sort of capture the lease for AWE's.

MR. HINNEFELD: Right.

DR. MAURO: A good sense of the spread is in that

document. I would like to point out though that the concept of ninety-fifth percentile as being the -- the approach, we will be getting into this and it'll be peripheral but it's not universally being applied and how it's being applied is interesting and we'll be talking about it. So there's a little bit of linkage, I under -- I understand the philosophy you just described and I agree with it by the way. We do have a large spread on the air sampling, you pick ninety-fifth percentile, that covers a lot of ills. But we'll see when we get into these other matters that it's not always the ninety-fifth percentile as one would think it is.

MR. HINNEFELD: Okay. Well I'm referring to what Jim said.

DR. MAURO: Yeah, no and I agree with it. And I think that concept is a solution for the oronasal breathing.

MR. HINNEFELD: Okay.

MS. MUNN: This is the first time I've had an opportunity to look down the list of what we've identified as global issues. Does anyone have any comment about these? Any additions or suggestions based on our prior deliberations?

MR. HINNEFELD: Some of these Jim indicated are complete. A smoking adjustment for lung cancer that was the alternate -- I believe that's on the lung model, isn't that the new NCI model?

DR. ZIEMER: Yeah.

MR. HINNEFELD: So I believe that one is complete.

MS. MUNN: So under --

MR. HINNEFELD: Thorium welding rods has been presented. I don't guess there's been a paper written on that yet.

MS. MUNN: So somewhere out here under -- under actual finish we --

MR. HINNEFELD: Yeah, we'll -- we'll update this. Like I said all I have right now is a list of internal dose from Super S plutonium that's completed you know the document's out there, the PDR is being worked, we're reworking the cases. Some of these are complete. But we'll have an updated --

DR. MAURO: When an -- when an item makes it onto the global issues that's something that emerges from you all's process, that is you know whether -- whether it's an interaction with SC&A and the Board at some point in that processing it becomes

apparent well you know really this has some cross-cutting issues and emerges in that fashion.

MR. HINNEFELD: Uh-huh.

DR. MAURO: Now let's say it turns out you know in -- in our SC&A's deliberations from where we review the material and workgroup meetings, there may be certain issues that start to appear to us that perhaps are cross-cutting. Is this something that we should bring forth during the meeting because I have a couple in my mind right now quite frankly.

MR. HINNEFELD: Well I think --

DR. MAURO: Or is that something that's inappropriate for us to discuss?

MR. HINNEFELD: Well I think it would be a question for the workgroup and the Board. It would seem like you know this is sort of... It would seem like that would be a way to findings you know because we don't -- we don't necessarily say that every one of these you know came to us -- you know came to us. I think some of -- quite a number of these come from these -- that kind of discussions.

DR. ZIEMER: Well didn't some of these come through SC&A findings anyway?

MR. HINNEFELD: Yeah, yeah, right. Quite a number of them did. Yeah.

MS. MUNN: But also quite a number came from the deliberations of this group right here which is certainly an appropriate source for bringing them to the list it seems to me. If you have others that you're aware of that are not on the list and you're looking for a place to put them certainly it appears this group would be quite receptive to hearing those.

DR. MAURO: Okay as -- as they come up. Because I do have -- I have one particular in mind.

MS. MUNN: Right.

MR. ELLIOTT: I think you should talk to Jim also, we'd be receptive to hearing what your thoughts are you know and however it's placed into the deliberation process is you know it would be another matter but certainly we would want to hear it.

MS. MUNN: Okay. You'll want to get it on there because this resolving this particular overarching list resolves many problems on many sites so it's crucial for --

DR. MAURO: I think it's important because what I'm seeing after doing this now for about three

years is that every time we do a site profile, every time we do a -- well not a procedure review necessarily but every time we do dose reconstruction, these same issues are coming up -- these same issues are coming up over and over and over again and we revisit them over and over and over again and little by little they find -- some of them find their way to the global issues. I think a little bit more of that would be create an efficiency where yes this is -- you know so we don't -- so we -- we -- I think if we could start moving more of those into global issues because once they're solved, they're solved across the board.

MR. HINNEFELD: Yeah. Okay.

MS. MUNN: But there's no question, dealing with them at each site is not only painful, it's wasteful and we really should be able to avoid that as soon as possible. So thank you, John. Any other comments on global or overarching issues? If not, let's take a ten minute break, just a quick one, please.

(Whereupon, a break was taken from 11:05 a.m. until 11:15 a.m.)

SC&A – COMMENTS ON NEW RESPONSE DATA

MS. MUNN: All right. We're back on. We're ready to resume where we left off on our proposed agenda. This past week NIOSH presented us with three new comments to items on our currently operable matrix and Stu, do you want to go over those very quickly to see what SC&A comments -- responses to those might be at this juncture?

MR. HINNEFELD: Okay.

MS. MUNN: We're starting with OTIB 17, findings 7, page 17 of the current matrix.

MR. HINNEFELD: Yeah, I actually wrote this on 17-6 which I think is the -- I may have made a typo at some point when I --

MS. MUNN: I think you did. I thought that I was looking at 06 but I started --

MR. HINNEFELD: But it's finding -- finding 17-6. And this relates -- the finding had to do with this -- this TIB, OTIB17 is about shallow dose calculations and mainly beta dose calculations but shallow dose calculations and the OTIB makes the statement that if the limit of detection is based on low energy protons for the shallow -- for the open window then you need to adjust that limited detection with the exposure with the beta parts because a low -- low energy proton and open

window film badge the film will over respond and so you'd have to adjust for that. You know, you wouldn't use the same LOD as you would for the beta dose. In fact the beta dose you would like to have a higher limited detection. So we wrote that in the OTIB, that was the nature of the finding and then subsequently SC&A's technical report that they wrote on OTIB17 which I don't have my -- I didn't get my response out, I didn't have it ready until the last minute, I figured why send it out. We won't have a response for the OTIB17 white paper. That -- from what I read that it sounds like in that report, SC&A agreed that if in fact you know that the shallow dose or the open window LOD was -- was derived using low energy protons then in fact it is appropriate. So that's just what I wrote here.

DR. MAURO: And that's correct. That was our response to it.

MS. MUNN: So that item is now cleared?

DR. MAURO: Yes, from SC&A's perspective.

MS. MUNN: All right. 0017 item 06 can be recorded as closed and the next item is OTIB 0019 item 1, page 24.

MR. HINNEFELD: Right, the finding starts on page

24, the new information begins on page 25, again, it's headed December 11th. This finding had to do with OTIB 19 is the co-worker, sort of the general co-worker approach set and it talks about getting a dataset, rank ordering the data, doing an R squared and if it's good then you feel good you've got log -- rank --rank ordering it a log normal tune of distribution file. You get a good R squared then you feel like it's good that you've got lognormal data. And SC&A pointed out correctly that R squared test in that circumstance there's a build in -- there's a -- by rank ordering the data you have built in association. So R squared isn't an unbiased indicator there. So our -- our latest and I relied of course Jim Neton was involved in this -- in this discussion response, I just kind of handed this one to him to work on. So he's provided a write up here and essentially our -- our position here is that we don't -- we aren't really using an R square test -- that R square test to infer that the data is lognormally -- lognormal. We -- we came to the -- we come to the question with the belief that the data was lognormal based upon what we know of published

literature and -- and we've also actually done some tests using the Anderson-Darling test I think is one Jim said, testing various you know, fits, various potential distributions to the datasets we have. And out of some sixty datasets that we have that we've collected for this program fifty-seven of them, lognormal was the best fit of the available distributions. Two of them were normal and one was uniform actually so I'd say it'd probably be a very sparsely populated dataset. So based on the fact that we have a sort of going in belief that it's lognormally, we're really just looking for -- for significant departure from lognormal because we feel like if -- if in fact the data is pretty close to lognormal you can draw good enough inferences in terms of various percentile distributions from that rank order distribution -- or cumulative distribution plot and the line and in fact it's a little easier to use than actually just counting the data and taking the ninety-fifth percentile from the worker data. So it's a little easier to use, oftentimes ends up with a higher value for the ninety-fifth percentile because the distributions tend to fall

off at the straight line at the top. So if you -- if you just counted in rank order you could be up on where it's falling off the straight line and the straight line approximation from the -- from the plot actually gives you a little -- a little higher value than the ninety-fifth percentile. So.

DR. MAKHIJANI: Stu, when -- when -- when the I -- you know very likely been an unknown distribution we lognormally what we're assuming when doing our squared tests --

MR. HINNEFELD: Right.

DR. MAKHIJANI: But is there some kind of evaluation of what happens in the few cases where you're wrong and how off you could be in your determination? How -- how poorly you might do if the distribution was something else and you're relying on it being lognormal?

MR. HINNEFELD: In those three out of fifty-seven?

DR. MAKHIJANI: Not in the --

MR. HINNEFELD: Or --

DR. MAKHIJANI: Yeah -- or --

MR. HINNEFELD: Because I mean there are certain tests for lognormality which are pretty stringent

and while these distributions may not actually pass with a high -- with a what I guess would be a low P value that -- those tests for lognormality but they clearly are approximately lognormal, just you know, you can see that.

DR. MAURO: When you have a large amount of data and you do rank them, because that's one of the things we used to do to see how that worked.

MR. HINNEFELD: Uh-huh.

DR. MAURO: And we ranked them from high to low and you pick off the ninety-fifth percent highest value.

MR. HINNEFELD: Uh-huh.

DR. MAURO: You had mentioned that you would look -- did you look at this data from that perspective, that is --

MR. HINNEFELD: I don't know if we did that rank order on all those --

DR. MAURO: I usually find that interesting. If it turns out that the ninety-fifth -- ninety-fifth percent value in numerical order falls more or less in place where your fit falls, you know I get a warm feeling and it looks like it's really good. And but I hear your argument and I agree everything we looked at, everything I've ever

looked at has always been lognormal. You know, but Bob, yeah, I know you work with this too, please.

DR. ANIGSTEIN: Yes. We've found that this is not always the case and it's not accurate. I just happen to recall one instance which was not dose distributions but Chi over Q's for Y-12 the environmental exposure and that what happens is the actual data deviates from the lognormal at the upper end. So even though over perhaps the major portion of it yeah it looks lognormal, but if you're trying to pick off -- if you're doing actual nonparametric determination of the ninety-fifth percentile, I think we also found this at Bethlehem Steel. I'm just going by memory now, I can't say the specific example, you find that the ninety-fifth percentile is significantly higher than the ninety-fifth percentile of the assumed lognormal distribution because those few points at the top devi -- you know, have a tendency to deviate upward.

MR. HINNEFELD: Well, there may be --

DR. ANIGSTEIN: So, that's the observation.

MR. HINNEFELD: There are situations that I'm sure where that happens I think -- I think it was

(indiscernible) who published this collection of data that we've used since co-worker --

DR. ANIGSTEIN: No, our --

MR. HINNEFELD: He indicated that -- that he tends to see the tail go down but I think -- it's the question is shouldn't you know, can we look at those datasets that we have and what is the difference between counting -- you know essentially counting the ninety-fifth percentile versus the straight line estimation?

DR. ANIGSTEIN: Sometimes there have been significant differences.

MR. HINNEFELD: Yeah.

DR. ANIGSTEIN: And it would -- you know a suggestion, a possibility to resolve would be to simply use this nonparametric test where you actually go in and interpolate the actual data and get the ninety-fifth percentile and then it's completely theory free, it's free of any assumptions. This is the ninety-fifth percentile because it is the ninety-fifth percentile.

MR. HINNEFELD: Well, I'm partly going to have to defer to Jim on the discussion but -- and we -- but we could -- I think it may be informative to look at the distributions we have and -- and do -

- now Bob when you say nonparametric, you just mean just rank them, right?

DR. ANIGSTEIN: Right, you rank them and then you do and then there is the formula for interpolation you know if you -- if you happen to have one hundred data points or one thousand data points then it's obvious the ninety-fifth or the nine hundred and sixtieth is your ninety-fifth percentile by definition and when it's -- when you have some odd number as you normally would there -- there is just an interpolation method.

MR. HINNEFELD: Sure, sure. Okay, I just wanted to make sure I understood exactly what that meant.

DR. MAURO: The only time that doesn't work well is when you only have four or five numbers.

MR. HINNEFELD: Right.

DR. MAURO: That it spread out pretty nicely but it gives you -- that's -- that -- that's not as -- doesn't give you the same warm feeling.

MR. HINNEFELD: Right. Well I think we could go and with the same dataset I mentioned earlier, look at the nonparametric ninety-fifth percentile versus what would be generated based on the assumption that it's lognormal and look at you

know, what differences are we talking about.
DR. MAURO: By the way just for my -- are we talking about air sampling data here? Is that what -- I -- I lost track or -- or are we talking about -- what is -- what are --
DR. ANIGSTEIN: I was just using the air sampling data as an example of things that I personally have gone in and done calculations on.
DR. MAURO: The only --
DR. ANIGSTEIN: The same -- the same argument was made well it should be lognormal.
DR. MAURO: The reason I ask is when you're doing this and you say okay I want to pick some number as being claimant favorable, when talking air sampling data then you -- you have the confounded problem and usually like to work with the time weighted average data as opposed to -- as opposed to individual samples because individual samples could be really off the charts for a short period of time.
DR. ANIGSTEIN: Sure. No, I was just using this as an example.
DR. MAURO: Okay.
DR. ANIGSTEIN: Of -- of a -- example of statistics of you know, statistic on databases

that I've looked at not -- I didn't mean to apply this air sampling data.

DR. MAURO: Okay, let's say that would be bioassay data, which is exactly what you want, okay.

DR. ANIGSTEIN: Yeah.

MS. MUNN: So, what did I hear with respect to OTIB 19-01?

MR. HINNEFELD: Well, what I suggest is that we could compare the nonparametric and the assumption of lognormal parametric, ninety-fifth percentile to these various populations we have. I won't have to do that, our statistician has to do it so I can willingly offer that we'll do that.

MR. ELLIOTT: We'd like to limit it to certain ones --

MR. HINNEFELD: Certain ones, maybe look for you know, Bethlehem Steel is one that Bob mentioned.

DR. ANIGSTEIN: I think, again, going by memory I think the same thing applied to actual doses at Iowa, IAET.

DR. MAURO: Is this almost like -- in this procedure, this is more of a generic procedure of how to deal with a co-worker model -- building

co-worker models?

MR. HINNEFELD: Yes.

DR. MAURO: So what I'm hearing is maybe the solution, one strategy would be okay, while the co-worker models -- while the dose reconstructor's building his co-worker model, according to this protocol you would use, you know this fit and pick off the ninety-fifth percentile on the -- on the lognormally fit curve. Maybe there's just another step in the process to the extent it's possible to validate that assumption, rank order the data, see how they compare and if they compare well you know, or if it turns out the actual rank order gives you a higher value, at that point there's -- there's going to be some judgment. The -- depending on the dataset you're looking at the dose reconstructor may say well listen, I -- these -- these numbers that are at the high end maybe really aren't appropriate for whatever reason or maybe they are and if -- and if he judges there are it might be more appropriate to use the higher value of the two approaches. That would be one way to come at the problem which resolves the decision.

MR. ELLIOTT: So which way should we go here, Stu? We have two options here before us.
MR. HINNEFELD: I think -- well, I hate to offer a path forward without talking to Jim because -- but I think certainly some things we can do is compare parametric and nonparametric ninety-fifth percentiles on a selection of datasets that we have and then we can talk about okay, in those circumstances where the nonparametric is higher, what do we, you know, how do -- you know, it would certainly seem like if that were the situation there should be a step that okay, does that -- you know, should we use it then and not automatic -- you know, automatically you know a priori say that we will always adopt it but if it is higher then say okay, is there you know, some reason why that might be appropriate or not appropriate to use and should we make it a conscious decision whether to use it -- I mean that might be something that could be done.
MR. ELLIOTT: I like John's suggestion. I think melding the two together brings us to where we all want to be. We're treating the issue and we're being explicit in a technical information bulletin or technical places to document approach

in saying how we've handled the development of this data for its use and maybe that's the way we should come out of this. We -- right, we should talk to Jim and get his input but I really appreciate your suggestion John, I think that's helpful.

MS. BRACKETT: This is Liz Brackett, if I can make a comment on this. That -- that OTIB is not used by the individual dose reconstructor. It's -- and in most cases we don't use the ninety-fifth percentile. What is done is the data are evaluated by a few people to generate the numbers -- the intake rates for a site and the dose reconstructor simply takes the intake rates out of a subsequent OTIB and so I guess my question would be you know, how we would actually implement this if we came up with a different ninety-fifth percentile then would that mean we would change the GSD because what happens now is that the median is used to fit an intake and then that's assigned as a lognormal distribution with the GSD determined from the fiftieth and eighty-fourth percentile as the fit.

MR. HINNEFELD: Well Liz I think that's part of our discussion with Jim is what's -- what's the

possible outcome here because like I said we use -- we only use these to determine -- well GSD is the key element and so --

MS. BRACKETT: Right.

MR. HINNEFELD: But whether -- the question remains you know, if -- if the parametric approach that we're using understates one or more of those higher you know, percentile numbers then the GSD would be understated as well. So I mean the question remains regardless of what's used.

DR. MAKHIJANI: Well it won't be a GSD anymore you know, because then you're --

MR. HINNEFELD: Because now you longer have a --

(multiple speakers)

MR. HINNEFELD: You no longer have a distribution, that's right.

DR. MAKHIJANI: Liz is quite right; it's a little bit more of a can of worms than what we can...

MR. HINNEFELD: Yeah.

MS. BRACKETT: And one other point though is that -- actually that specific GSD is not what's used for the intake. What happens is the median or the means -- the -- the fit is done on the side of bioassay results but then those results are used to fit an intake and the fiftieth and

eighty-fourth percentiles are fit for the intakes and the GSD is actually the GS -- it's -- it's the ratio of the intake rates. It's not based on the individual sets of bioassay data.

DR. ANIGSTEIN: Wouldn't one solution be to simply not use a distribution for the intakes but just assign a fixed value corresponding to the ninety-fifth percentile?

MS. BRACKETT: I'm not sure I understand what you're saying.

DR. ANIGSTEIN: Well in other words, instead of assigning a distribution, generating a distribution which is then used -- which is then used by the dose reconstructor, simply give the dose reconstructors a fixed value to use for the missed dose and put that into IREP.

MS. BRACKETT: Why would you --

DR. ANIGSTEIN: A fixed value as opposed to a distribution.

MS. BRACKETT: I don't understand why that would be preferable for -- for -- for one thing most of these people that it's being assigned to are less likely to have been exposed than the people who are monitored so we don't want to assign the upper value. We're looking for a reasonable

value to assume -- to assign to people.

DR. MAURO: As I understand it the distinction -- when -- when internal exposures are at play, we're not talking external now, when I remember we've been through a discussion of this and SC&A was arguing the ninety-fifth percentile but I think NIOSH appropriately came back to us and said listen there are circumstances when the full distribution is the more appropriate value. So this is helpful because I wasn't aware that was what we were really talking about that is. So what we're really saying here is when -- when the dose reconstruction is being formed of an individual who was not monitored and there's reason to believe there was good reason why he wasn't monitored because he really wasn't believed at that time to be a worker that would be expected to have an internal exposure. Under those circumstances the appropriate approach is to use the full distribution for the exposed people, not the ninety-fifth percentile and we fully agree with that. Now, so -- so that helps set the frame -- frame the problem. Now, given that, I guess the issue of the ninety-fifth percentile which is how we all started this, does

that have any play because I don't even think that -- I mean that certainly has play if you were trying to pick off the ninety-fifth percentile.

MR. HINNEFELD: Right.

DR. MAURO: Because you're doing it for a person who you want to reconstruct his dose and he is a worker that should have been monitored but wasn't.

MR. HINNEFELD: Right.

DR. MAURO: But now we're in a different framework, this is a worker that wasn't monitored and there's evidence that there probably was good reason why he wasn't monitored.

MR. HINNEFELD: I think probably the decision was made that he would be -- he was not exposed and there are circumstances.

DR. MAURO: Uh-huh.

MR. HINNEFELD: And but other people were chosen that the site feels like they will --

DR. MAURO: Yes.

MR. HINNEFELD: They are exposed and they have a routine monitoring program. I guess the position is that the monitor -- while the people who were selected as quote unmonitored and unexposed may

not truly have been unexposed, they were exposed more -- less than that same site decided who was exposed.

DR. MAURO: And that's --

MR. HINNEFELD: And so --

DR. MAURO: And that's been a recurring discussion that we've had and we understand where that stands.

MR. HINNEFELD: Right.

DR. MAURO: There was some argument of cohort monitoring went -- you know --

MR. HINNEFELD: Yeah.

DR. MAURO: I don't want to --

MR. ELLIOTT: Well it's a global issue now too.

DR. MAURO: Right.

MR. ELLIOTT: It's one on the list, unmonitored workers.

DR. MAURO: No, where I'm going with is and correct me if I'm wrong, maybe this is a non-issue because if we're only talking about the framework of application that is appropriately applied to workers who were not monitored and appropriately weren't monitored but may have gotten some exposure but certainly not the upper ninety-fifth percentile and certainly not

exposures that would be attributed to people who were workers in the worker settings. Under those circumstances I know it's NIOSH's approach to assign the full distribution which would be very claimant favorable and I agree with that. Then once I get to that point I say why are we discussing ninety-fifth percentile?

MS. BRACKETT: You're right, the ninety-fifth percentile as the OTIB currently stands the ninety-fifth percentile is not used for anything but fiftieth and eighty-fourth percentiles are what's used to develop the intakes and having a different ninety-fifth percentile would not have any impact on the current --

DR. MAURO: That's what I suspected, right, Arjun?

DR. MAKHIJANI: Don't you assign the ninety-fifth percentile in most cases where you know like, for instance at Rocky Flats uranium workers were not at all monitored in the 1950's --

MR. HINNEFELD: I know.

DR. MAKHIJANI: And but they should have been monitored -- what would -- what do you do in that circum -- don't you assign the ninety-fifth percentile?

MR. HINNEFELD: I don't know what happened.
DR. MAKHIJANI: I thought you did.
MR. ELLIOTT: In that set of circumstances, yes, we would --
DR. MAURO: Yes, that's a different set of circumstances.
DR. ZIEMER: Is that the worker who should have been monitored --
DR. MAURO: Yeah, right.
MR. ELLIOTT: As a data gap.
DR. MAURO: Right. But then -- then --
MR. HINNEFELD: But then you need that number.
DR. MAURO: Applied. You see it's only within that framework when we -- when we get to the point where we're saying listen we have a person that wasn't monitored but probably should have been monitored as the examples that we just talked about unless we get to the point where we agree, yeah, that's true. Then the discussion applies. So I say it's within that context. Now, if this -- if this OTIB was designed to address both issues you know, when you do it -- when you need a full distribution and when you do the ninety-fifth percentile then I think we're getting back to then I think, you know, we're

heading in the right direction.

MR. HINNEFELD: I don't think -- yeah I don't think I kept this OTIB on my disk, I don't think I have it here but --

DR. MAKHIJANI: Well it says here the purpose is to assign -- well let me just read what quotes or summarizes the purpose of the procedure from our review. This OTIB provides guidance for assigning internal doses in workers using coworker bioassay data for workers who do not have bioassay data where the possibility exists that the worker may have experienced internal exposures. So it's pretty --

DR. MAURO: It's pretty broad.

DR. MAKHIJANI: I would say that it covers both --

MR. ELLIOTT: But that's your paraphrasing of what you see the purpose being of this OTIB. But we ought to look at the other --

MR. HINNEFELD: Yeah.

DR. MAKHIJANI: I can download this. I can look it up.

DR. MAURO: Well we -- I mean, I think we understand I mean it's really a matter of what is the effect of the OTIB in the narrower use. Then

really this is a non-issue and goes away. If it's for the broader application to capture not only the full distribution but also the upper ninety-fifth percentile for the broader application then yeah I think the discussion we just had is probably -- and the solution applies.

MR. HINNEFELD: Or -- or perhaps that the special question that we talked about like the Rocky Flats case is an exception that has to be dealt with in a site -- all -- every site has to have its own specific approach with its own specific dataset. And that's -- this TIB is describing how to do you know, in general how to do the site's dataset. If once you get to a site and say let's use the Rocky Flats example where the decision was made these people were exposed, were heavily exposed, there's this data gap and they should have been monitored but weren't, that then departs you from your normal thinking and use of this. Now I don't know how specific OTIB-19 is about that condition whether it's a -- it probably doesn't say specifically you know, only use this when the situation is as we expect to find it and when it turns out differently you have to go to something else. I don't know if it

says that specifically but I think certainly that's the way we behave is that you know, there are certain, you know, if there's a site specific set of information that makes your assumption in that you use at other sites, if it makes it non-attainable at that site that means you have -- you have to do something different there which is what was done at Rocky. I think -- I think we're -- we're -- we're spending a lot of conversation and a lot of time here on an issue that doesn't really matter much. I mean we talked a little bit about parametric and non-parametric, we've talked about well, if you don't use the parametric then when do you really have a GSD and so I don't know that this is a real big hitter in the total -- in the outcome of things and the true test of whether data, you know, co-worker data is used appropriately would be in the individual site co-worker models which are their own TIB. I think that -- if we wanted to have this extent of discussion I think it would be in that circumstance, not here on -- on -- on the document that really doesn't specifically drive any dose reconstruction. It -- it -- it -- it leads to the generation of other OTIBs. That's

what this document does.

MS. MUNN: So what's our real action item here? Is it to look at clarifying for the purpose of the matrix when the OTIB is used? Is that an action item? Or is the action item to actually compare a parametric and nonparametric ninety-fifth percentile -- tell me what this action item is? What will make everybody happy?

MR. HINNEFELD: See our initial response -- our initial response way up at the top we said the information is intended -- it was very general guidance, not as a requirement. Each set of data has its own unique properties and those are taken into account as much as possible. So this is a general direction. And so the specifics have to be divined from the OTIBs that are site specific. And I think this can just probably just go away or be closed or whatever you want to say because I don't know that any additional action needs to be taken at this -- on this document.

DR. MAURO: The only scenario I want to protect against and I agree with what you're saying but the only scenario is one in which you're -- you're in a position where you're going to draw upon this general guidance. Okay, and the

general -- but you're in a circumstance -- now I don't know whether you tell me if this circumstance could arise; if it can't arise then it's not a problem. Circumstance where I'm going to draw upon this guidance and -- and I'm going to use this method to predict the ninety-fifth percentile for a fixed value input into my -- for my dose reconstruction and then eventually for my IREP, and if the person were to derive the ninety-fifth percentile using the approach that's here we run into this possible problem where you might be underestimating the ninety-fifth percentile. That's the only circumstance that I think I'm concerned about might arise. Now if that circumstance cannot arise by the very nature of how this particular OTIB is being used then the problem goes away. But if that scenario that I just described can occur then I think something needs to be done regarding the possible disparity between the fitted value and the rank -- the rank values.

MR. HINNEFELD: Well I don't know that, that situation's arised when we have used it in that fashion but I don't know that it could not arise. So, with an edit to OTIB-19 that would warn of

that.

DR. MAURO: That probably would do it.

MR. HINNEFELD: That would say this -- if -- you know, if you're going to use, treat data in this way to identify a ninety-fifth percentile to use as a value you not only use the parametric but also comparative parametric --

DR. MAURO: Yeah, I think that's the answer.

MR. HINNEFELD: And at least if the parametric's higher at least determine whether the non-parametric is the better one. Something like that.

DR. MAURO: That certainly sounds like a suggested strategy that of course you want to discuss with Jim.

MR. HINNEFELD: Yeah.

MR. ELLIOTT: I think the action I hear is on us to take this discussion back and include Jim in a further examination of the issue now that we have a better understanding of where -- where this has led us. So, we'll come back to you with what we think then.

MS. MUNN: Possible page change?

MR. ELLIOTT: Yeah, it could be a possible page change or revision to the current -- to --

MS. MUNN: Okay. Report at our next workgroup meeting?

MR. ELLIOTT: Okay.

MS. MUNN: All right, I think I've captured what I believe our action item's going to be. OTIB 25-01.

MR. HINNEFELD: I believe this had to do with breathing rates on radon breath studies, is that correct?

MS. MUNN: Yes, I believe so.

MR. HINNEFELD: Okay.

MS. MUNN: Page thirty-three.

MR. HINNEFELD: Okay SC&A correctly pointed out that the one point two meters per minute is in fact a working breathing rate, it's a combination of work and rest and that people who are giving radon breath samples certainly were at rest in the laboratory and they'd have to breathe aged air for awhile. So the exhalation rate or the inhalation rate in the formula for radium for the inhalation rate (indiscernible) rate. So the higher inhalation rate relate -- you know, results in a higher calculated radium burden. So but we certainly can change to there is an -- actually the ICRP does list the resting breathing

rate, I think it's something less than a liter point five three -- we've listed it in our response. And we can use that anyway as -- as the -- as the breathing rate to do the radon calculations, that would be the outcome. I mean it's certainly something we can do. We don't use that -- we don't do that many, you know, breath analysis, radium, dose reconstruction.

MS. MUNN: SC&A, do you have any problems that --

DR. MAURO: Well that's -- that's where we were concerned. It sounds like -- it sounds -- I don't know this -- would this be in abeyance or would this be closed?

MR. HINNEFELD: I guess it would be in abeyance because we have a page change to make on there too. Now anything done in the meantime we won't go back and reconsider because --

MR. MARSCHKE: So you want to change it to the lower number?

MR. HINNEFELD: Yes.

DR. MAKHIJANI: Are we sure that all the radon breath samples were taken -- it wasn't like an award rate or something like that?

MR. HINNEFELD: Well if you would like us to, we'll leave it the way it is. We're just being

nice guys here.

DR. MAKHIJANI: Well I -- you know, we -- we -- we -- we -- we want to be precise but we also don't want to correct it in a way that erase -- I'm just anticipating --

MR. HINNEFELD: Well it occurred to me -- it occurred to me they'd say well look if we're saying they're at rest we have to defend the fact that they were at rest. And if we don't say they're at rest then we don't have to defend it and we can say well they were breathing this hard when they took the test as well when they were working and so if anything we're overestimating.

DR. MAKHIJANI: Yeah, I think --

MR. HINNEFELD: I got no problem staying where it is either.

DR. ZIEMER: I think we have to look at their procedure though. If they're going to a lab they're not coming right out of the workplace, they're probably going to --

MR. HINNEFELD: Probably -- they probably --

MR. ELLIOTT: It's not the lab going to them with a vacuum model. They're going to the lab and doing it in the vacuum.

DR. ZIEMER: And they're going to breathe some

bottled air or something.
MR. HINNEFELD: Usually you have to -- bottled air, normally you have to breathe bottled air.
DR. ZIEMER: And how long is the sampling period assigned?
MR. HINNEFELD: I don't know; I'd have to look.
DR. MAKHIJANI: It's a minute or two, it's short.
DR. ZIEMER: Yeah, short, it's very short.
DR. MAURO: So -- But that would be a lower breathing rate and therefore lower release rate, therefore if it's -- you --
DR. MAKHIJANI: No, you -- a higher number?
DR. MAURO: You get an underestimate, in other words if you're --
DR. ZIEMER: So given outflow in the air --
DR. MAKHIJANI: You get the same amount of radon.
DR. ZIEMER: Same amount of radon for a lesser volume.
DR. MAURO: Oh, okay, okay.
DR. ZIEMER: It makes the concentration look higher.
DR. MAURO: Oh, I got you, I got you.
MR. HINNEFELD: Well -- in the OTIB -- in the OTIB -- in the OTIB --
DR. ZIEMER: Well it's kind of intuitive because

--

DR. MAURO: It's less -- less air is coming out but the concentration --

DR. ZIEMER: For a given count. Right now you're assuming -- if you don't assume less than rate you're assuming a higher volume of air associated with that given count.

DR. MAURO: Right, right.

DR. ZIEMER: Okay, now if you assume a lower volume of air with that given count then it looks like the concentrations are higher.

DR. MAKHIJANI: Yeah, that can get the other way about from what you're saying.

DR. MAURO: Yeah, I mean that's what I just heard.

DR. ZIEMER: No, it -- it results in a higher --

DR. MAURO: Higher?

MR. HINNEFELD: If the key -- if the key -- if the key factor is exhalation per unit.

DR. ZIEMER: Higher body burden.

MR. HINNEFELD: That's what the key factor is.

DR. MAURO: If you're looking for -- oh, are you looking for atoms being --

MR. HINNEFELD: Exhalation per unit time.

DR. MAURO: Exhalation per unit of time.

MR. HINNEFELD: I think is the indicator, isn't it?
DR. MAURO: So if you're --
MR. HINNEFELD: Anyway, look at -- look at the form -- the OTIB has the formula for radium burden and inhalation is in the numerator.
DR. MAKHIJANI: Based on type of volume, right?
DR. ZIEMER: Yeah.
DR. MAURO: Inhalation's in the numerator.
MR. HINNEFELD: Inhalation --
DR. MAURO: Going with the higher inhalation.
MR. HINNEFELD: Inhalation rate is in the numerator.
DR. MAURO: All right this is --
MR. HINNEFELD: In the formula in the OTIB.
DR. MAURO: This is one of those brain teasers; I have to say that. I'm trying to come up with --
DR. ZIEMER: You've come up with a concentration of radon in that exhaled air and then from that you go back to calculate particles.
DR. MAURO: Therefore you are being claimant favorable.
DR. ZIEMER: That's right.
MR. HINNEFELD: See, you know that's right.
DR. MAURO: All right, well that didn't sink in

until just now unfortunately. I apologize. Yeah, it says that.

MR. MARSCHKE: We'll reduce the estimate.

DR. MAURO: Because, I think we can leave it alone.

MR. HINNEFELD: Be glad to do that too.

MR. ELLIOTT: I think you should look at it again.

DR. MAKHIJANI: Yeah, I think we should do calculations. This real time mathematics is a little --

DR. ZIEMER: We had this discussion at the last meeting.

DR. MAURO: We did it before and it didn't sink in then either.

MR. HINNEFELD: You have a measure -- you have a measured concentration and then how much air and then so the inhalation rate is how much air is coming out of a person who has that concentration. So a higher -- a higher exhalation/inhalation rate means that there's more radon coming out of that person in a unit of time which means that there is more ra -- you know, radium giving off the radon in the body to be taking out in that unit of time. All right?

DR. MAURO: I guess I was thinking about it a little differently. I thought the radon flux entering the lungs as sort of a constant and then the more you breathe that -- you're saying --
MR. HINNEFELD: I think the -- I think the presumption is that the radon is generated and available for exhalation at a constant rate that is directly related to the radium burden.
DR. MAURO: I -- I had a different picture in my head. I'm picturing that you're breathing --
MR. HINNEFELD: Breathing as you're diluting it.
DR. MAURO: Right, that's it. But the radon is entering -- you know, certain weight --
DR. ZIEMER: Oh yeah, but the number of radon atoms is very small compared to the volume of air so it -- there's more -- the radon's available regardless of the breathing rate, it's going to be exhaled.
MR. HINNEFELD: Yeah.
DR. ZIEMER: It's not like you can -- you're going to saturate the --
MR. HINNEFELD: The key -- the key factor actually in the numerator is actually --
DR. MAURO: I said the numerator is in the --
MR. HINNEFELD: Radon exhalation per unit of time

is actually -- so if you're actually getting an exhalation per unit of time measurement, the breathing rate essentially goes away.

DR. MAURO: You base that on -- you base that on a concentration. That is you pull an air sample --

MR. HINNEFELD: Exhaled air, yeah, exhaled air.

DR. MAURO: Yeah. You take an air sample and you figure out here's a concentration of the radon becquerels per liter in the air I just took out of this person's air.

MR. HINNEFELD: Uh-huh, right, yeah.

DR. MAURO: Now from that you back calculate how many atoms -- how many atoms per second are leaving and from there you go directly to the quantity of radium.

DR. ZIEMER: Yeah.

DR. MAURO: Now, now see I had in my mind a little different visualization on this thing. What you -- what you'd sample the atoms per cubic meter that you have in your sample that is going -- if you are breathing heavily, okay, you're breathing heavily, that's going to be different than if you were breathing lightly and the difference is going to be that the concentration

is going to be lower when you're breathing heavily.

DR. ZIEMER: Oh, you're -- you're -- yeah, you're assuming that somehow the air is diluting --

DR. MAURO: Yeah, because the rate in which the radon is leaving, the breathing process that's going into the lung and it's unrelated to the breathing rate.

DR. ZIEMER: Right.

DR. MAURO: So if you double the breathing rate, the concentration of the atoms -- of the radon in the air is going to be lower because you're breathing -- it's sort of like --

DR. ZIEMER: Yeah, it's going to look like you're going to have a lower body burden.

DR. MAURO: Yeah, so I have -- see I'm looking at it -- I'm not -- I don't know, I don't know. So I learn this stuff before the equation.

MR. HINNEFELD: Based on time.

DR. ZIEMER: I don't think the breath rate is driving the radon out, it's -- it's diffusing out --

DR. MAURO: So --

MR. HINNEFELD: Right, the presumption in the -- in the presumption in the formula is that the

given amount of radium in the body results in a certain amount of radon exhalation per unit of time.

DR. MAURO: Right.

MR. HINNEFELD: I mean that's the presumption in the formula that was used in this procedure.

DR. MAURO: Right. And that -- and embedded in that is the -- right, but their breathing rate is not in --

MR. HINNEFELD: Well the breathing rate is only in the equation because if you measure concentration and exhalation --

DR. MAURO: Because you measure concentration.

MR. HINNEFELD: -- then you have to use the breathing rate in order to get the radon exhaled per unit of time.

DR. MAURO: I feel as if we're arguing about stuff that's of marginal importance, but --

MR. HINNEFELD: We hardly ever use it anyway. There are only -- there are only a couple of sites where we would have the opportunity to use this.

MR. ELLIOTT: Well convince yourself; I think this is favorable with the human resting rate.

MR. MARSCHKE: Well (multiple speakers) equation

of the body burden the concentration in the air times the breathing rate.

DR. MAURO: Right.

MR. MARSCHKE: Divided by --

DR. MAURO: Yeah, see that's the place I'm having the problem with, see.

MS. MUNN: All right, I have an action item that SC&A is going to look at the equation again and the NIOSH response and satisfy themselves that that response is what they anticipate it to be.

MR. HINNEFELD: Well actually what we would like to do is just change our response and say we aren't going to change the document, leave the document the way it is; actually. I mean realistically you have to defend -- if you're going to say they were at rest and therefore they're going to give them a lower body burden of radium then you have to defend the fact they were really at rest all the time that they gave. I think they probably were. I think they probably were but I -- you gotta defend that they were at rest.

MS. MUNN: Right, so I'm -- I'm saying any comments back from SC&A --

(multiple speakers)

DR. WADE: SC&A is working it out right now.

DR. MAURO: I'm sorry.

MR. HINNEFELD: You're working it out right now.

DR. MAURO: We'll -- we'll -- we'll look at this right now --

MS. MUNN: Any comments back from SC&A by the next working group, otherwise this item is closed.

DR. MAURO: Exactly.

MS. MUNN: All right.

DR. MAURO: That's a fair --

MS. MUNN: Very good.

SC&A AND NIOSH – OTIB-0012 WHITE PAPER

Next item. Thank you Stu for the responses by the way. SC&A and NIOSH OTIB-12 white paper.

MR. HINNEFELD: Yes.

MS. MUNN: You were going to look at that, talk about it and give us what information we need to put the right words on the matrix.

MR. HINNEFELD: Well we're -- we have looked at it, we're continuing to look at it and I did speak to Bob Anigstein about it, he actually called me so he took the onus on himself to make sure we talked. I think there are some good points raised in that OTIB 12 white paper and

we're now evaluating you know, what's impacts, possible impacts, outcomes, things like that. So we don't really have a response to the white paper ready yet.

MS. MUNN: All right so the action item is NIOSH continue review and report to next workgroup.

MR. HINNEFELD: Yeah, now while we're talking about mechanics of getting it on the matrix, I guess it will stay where it is. It came out as an OTIB12 finding in a particular review, you know, OTIB12, so we can just put it on that. I mean it didn't actually come out in the SC&A product. OTIB12 became a white paper which leads to that.

DR. MAURO: But it's here now. Right, later on -- it emerged from one of the workgroup meetings I believe.

MR. HINNEFELD: Yeah, yeah. So in this case -- right.

DR. MAURO: The system is to track it.

MR. HINNEFELD: This white paper -- this white paper would have to be one of those other documents we'd link into.

DR. MAURO: Right and we have to reference it in the minutes -- that there was a white paper.

MR. HINNEFELD: Yeah.
DR. MAURO: And in theory if we can actually click on that that will be great.
MR. HINNEFELD: And link it in, yeah.
MS. MUNN: Uh-huh.
MR. HINNEFELD: Okay.
MS. MUNN: Okay, so we'll have a NIOSH response by the next workgroup meeting?
MR. HINNEFELD: I would think so. Our guy who's working on it is also working on Hanford and so his time is kind of split up but I think I'll have something by then.
MS. MUNN: All right. Since we don't have a date set up yet we can treat this --
DR. BRANCHE: Yes -- yes you do.
MR. HINNEFELD: We're meeting -- I thought we were meeting in Las Vegas.
DR. BRANCHE: We're meeting -- I thought we were meeting in Las -- in Las Vegas.
MS. MUNN: Yeah, we are meeting in Las Vegas but that -- but that's going to be -- when I -- I'm sorry, when I'm thinking the next workgroup meeting I'm --
DR. BRANCHE: You mean after the next Board meeting.

MS. MUNN: I was thinking after the next Board meeting because I'm not sure if -- if we can -- if any of these things we can have ready for the -- the meeting that we have before the Las Vegas meeting that's great but realistically speaking and knowing that the holidays are upon us I don't want to overburden --

MR. ELLIOTT: We can definitely have it for the following -- the meeting following that.

MR. HINNEFELD: Oh certainly we can have following January.

MR. ELLIOTT: Whatever we can get we'll try to present.

DR. BRANCHE: There's a February 20th conference call, that's the next Board meeting.

MS. MUNN: Yeah and the Board meeting, and we probably will anticipate prior to that time having another of these meetings.

All right, that clears our deck for the before lunch issues and we are a half hour early but the other good news is -- and I don't want to start PROC92 before lunch, we don't want to do that. So let's go ahead and take an early lunch break, and the other good news is one of the agenda items that we had for this afternoon was one that

I interpreted as being a separate item from the OTIB17 issue that we dealt with just this morning and --

DR. BRANCHE: So it's not a separate issue?

MS. MUNN: It is the same issue. 06 was -- 07 was not what we were addressing, we were actually addressing 06 and I did not know that until after I had -- was doing my review yesterday. So we may have --

MR. ELLIOTT: Got that one all done?

MS. MUNN: Yes, we have that one done, we may --

DR. BRANCHE: Early Christmas.

MS. MUNN: Yeah, Merry Christmas.

MR. ELLIOTT: That chair is so proficient.

MS. MUNN: Makes every effort, in terms of -- we do the best we can, unfortunately we hired a handicap. I am expecting that we will be back here in one hour. We can let our people on the telephone go eat as well. We'll be back here at one o'clock.

(Lunch break, 12:00 noon until 1:08 p.m.)

DR. BRANCHE: Michael Gibson, are you on the line? This is Christine Branche, Michael Gibson are you on the line?

(no response)

MS. MUNN: Apparently not.

DR. BRANCHE: But Mr. Presley -- Mr. Presley is here.

MS. MUNN: Yeah, we have Bob Presley --

DR. BRANCHE: And Paul Ziemer.

MS. MUNN: -- and Paul Ziemer and myself from the Board and we're ready to proceed with our afternoon agenda.

NIOSH – RESPONSES TO PROC-0092 MATRIX ISSUES

We're going to open with our PROC0092, with status and the response to the white paper. We all are aware of the importance of this particular procedure and are looking forward to moving through the issues. Stu Hinnefeld, would you please present NIOSH's responses to the matrix issue and give us an opportunity to discuss with SC&A what their reaction to those findings are.

MR. ELLIOTT: Could I speak first while Stu's collecting his thoughts here, making sure he's got the right page where -- I would just like as a prelude to this I think we should make note for the working group and for the record that there was a technical conversation held with John Mauro, Arjun, Stu and myself and John was so kind

to put together a set of minutes about that conversation. I think they've all been shared with you on the working group; is that correct?

MS. MUNN: I believe so.

MR. ELLIOTT: So I thought it was a very productive conversation that we had and -- and -- I think what Stu and SC&A's reaction to what we're going to talk about here I think our -- is the product of that conversation. I'll just leave it at that.

MR. HINNEFELD: Yeah, I think one of the -- one of the elements we did start with I think I should mention for others who are -- for the workgroup and others who are listening is that when we send the draft dose reconstruction to the claimant and we have a closing interview with the claimant we do have a certain time frame that we want to finish up that process and get a final dose reconstruction -- get an OCAS1 back from the claimant and finish and send a final dose reconstruction. So we've got a certain time frame. We have a sixty day time period where we try to get that OCAS1 back and if someone for some reason never sends us an OCAS1 we have a process called Administrative Closure where we

can at least be done with that claim, it doesn't sit there undone forever. But Administrative Closure is not done forever. For instance if someone is administratively closed and later provides additional information and alters the dose reconstruction the claim can be re-opened, you know, revised if needed and we can pursue the OCAS1 process again. I'm not sure that quite came across, I'm not sure it was understood by the SC&A authors that, that was the -- that the Administrative Closure is not really done, you're done forever. It's administrative process so the case looks to us as if it's done. But if more information comes in then it is re-opened. And the sixty day time window is not hard and fast, I mean if the claimant tells us I'm gathering information, I'm going to provide you information, then we don't close the claim, we keep it open and wait for that information. If they keep telling us that and keep telling us and never provide us with anything then ultimately we will administratively close it.

MR. ELLIOTT: You have a grace period also.

MR. HINNEFELD: There's a two week grace period following the sixty days. So once the sixty days

is up they are -- the claimant is notified and -- in writing, again the letter that says we're going to close it in two weeks unless we hear from you and get additional information. So there is a follow up -- there's a warning at sixty days and then a two week grace period after.

DR. MAKHIJANI: That piece we were not aware of. It was not with procedure.

MR. HINNEFELD: Yeah, right.

DR. MAKHIJANI: We had some communication lapses.

MR. HINNEFELD: We've had -- we've had -- we've talked -- we've talked since the report came out and we've talked about that. So that's one thing I think to keep in mind when we talk about the Administrative Closure part of this and I guess in summary the report describes three observed interviews from about a year ago, about October 2006; is that correct?

DR. MAKHIJANI: Yes.

MR. HINNEFELD: Yeah, October 2006. And then a description of another questionable execution of closing interviews from discussions that have occurred during another PROC. So of the three observed -- from the three observed interviews

there clearly was a serious issue with one of the issues and the follow-up issues -- the follow-up interview associated with this, it was fairly a serious issue, that we are working with ORAU to say you know, we need to fix things so things like this don't happen. So, that's -- that's -- I want to tenor -- I want to give our response that way, kind of give that as the -- as the flavor for our response. The words on the response to findings, the NIOSH response to findings was prepared relatively early on, you know, we promised we would have it out by the middle of November and so it was prepared relatively early on and perhaps and after doing that and looking about at the papers some more we told ORAU, listen, all these recommendations, there are quite a number of recommendations for improvement in the SC&A report, I want a -- we want an answer on every one of those recommendations that either we're going to implement them or that we can't implement them because it's not feasible or we don't think it would be helpful or maybe we can't do that but we can do something similar. So we've also had that. That product we're getting in final form,

you know, we have received those -- that product, response to recommendations. We haven't -- I haven't sent it to the Board but we will as part of our response to this report.

MR. ELLIOTT: That's ORAU's perspective, it'll be our -- we'll sign off on it as --

MR. HINNEFELD: When it gets to say what we want it to say.

MR. ELLIOTT: Yeah.

MR. HINNEFELD: I think -- yeah.

MR. ELLIOTT: It'll be a NIOSH reaction.

MR. HINNEFELD: Right. Yeah, Paul?

DR. ZIEMER: Well aside from these particular findings it seems like we continue to hear what I would characterize as misunderstandings by the claimants as to what this actually is to begin with. I don't know how widespread that is or if we've just heard a few and maybe they're the only ones that have this problem or if they reflect a widespread view that somehow they're giving up some kind of rights if they sign this thing. Like well I'm not sure I agree with the dose reconstructions so therefore I won't sign it or I don't know if there's more information, therefore I won't. It appears that the claimants often

simply misunderstand, I don't know what can be done to alleviate that. Maybe some of these things will help with that, but is that a widespread misunderstanding or just a few people that we've heard from in the public comment period?

MR. HINNEFELD: Well it's -- it's hard to say definitively. You know, I don't know if we have any way of gathering effective data on that.

DR. ZIEMER: I mean most people sign that so maybe that's -- it's not a widespread.

MR. HINNEFELD: I think that it would be surprising if everyone who had some objection with that actually spoke to you so there's probably more than the specific people that talked to you. But I don't know that it's widespread, you know there have been I don't even know how many closeout interviews we've done. We've done over twenty thousand --

DR. ZIEMER: Thousands and thousands.

MR. HINNEFELD: -- dose reconstructions and each of those -- many of those have multiple claimants and so multiple --

MR. ELLIOTT: Each claimant gets a closeout interview.

MR. HINNEFELD: Each claimant gets a close interview so tens of thousands of these interviews have been done and there -- a handful of people have been unhappy enough with the process that they've actually sent us a message protesting that this wasn't done very well. But that's a very small number that's done that. But that's not to say that's all who are upset. You know, just because somebody wasn't happy doesn't mean they necessarily send a message to us and say boy, I didn't like this. So, it's just a little hard to get a measure of the extent of the issue. I don't believe it's rampant, but I think as you say you hear enough things that you would conclude that it may be as you know, an issue that's out there.

DR. ZIEMER: You almost only hear from those folks for whom it's a problem.

MR. HINNEFELD: Yeah and -- and another thing to remember is that as many parts of the dose reconstruction program we feel we've gotten better as time is moving on and I think that additional emphasis on this -- on the matter has improved over time. Now probably within the past year since the observation there's been some

improvements and this is not something that you necessarily write down every time or we don't have a complete record of all the instructions that are given to the interviewers because I mean they'd meet in staff meetings like everybody else has staff meetings and these things are discussed in that context and so you don't necessarily have a record of all the process changes or all the admonitions that were provided to them. So it's a little hard to say other than to -- other than to say that certainly the people interviewing, the managers of the interviewers and the project managers for ORAU all are -- are very keenly interested in making sure that interviews with the claimants are a good experience, as good of an experience as it can be for the claimant. I mean this is not -- this whole program is not particularly an easy process for the claimants and so it's -- there's a lot of empathy on their -- on their parts and a lot of feeling on the parts of the project interviewers that this is you know, something that we want to do well in the eyes of the claimants. Complicating these interviews is the fact that dose reconstruction isn't really terribly well understood. It's --

it’s hard to imagine explaining enough in a conversation of you know, about a dose reconstruction to a layman to provide a real thorough level of understanding of what was done, which is not to say you shouldn’t try to explain and answer the questions but I just think it’s almost inevitable that at some point you just hit an impasse when you can’t -- you just can’t explain it anymore, you don’t know how to explain it anymore. So there’s some of that gets wrapped up in here too, it’s the difficulty of the process for the lay public to understand. So some of that I’m sure is wrapped up in it as well.

MR. ELLIOTT: We try to very carefully explain that signing the OCAS1 is not an indication that they agree or disagree with the dose reconstruction but they have come to a conclusion in the process where they have no further information to provide and there’s this disclaimer at the bottom of that form. One measure of a level of dissatisfaction might be annotated OCAS1’s. When we get an annotated OCAS1, and by this I mean they come back to us and they say I disagree with the dose

reconstruction, it's all junk and you guys don't know what you're doing and they put some kind of commentary on it, then that defaults the -- the form itself and we have to go back to the person and say we can't accept this OCAS1 as submitted, we explain again what the purpose of the document is and that might be one measure of the level of dissatisfaction. But again, you're only going to get a segment of the audience.

DR. ZIEMER: But you're not getting large numbers of those compared to -- I mean out of twenty thousand or so dose reconstructions you probably have what, less than a tenth of a percent?

MR. ELLIOTT: Yeah. Well I talk to you at the Board meetings in my program report about the number of administrative closed cases and that's you know, it's hundreds, it's not thousands, it's a few hundred. I don't know exactly what it is right now but I -- so that's another measure of where we --

DR. ZIEMER: Right.

MR. ELLIOTT: That measures where we've taken every attempt we could to get the person to sign the OCAS1 and move the claim forward even to the point of telling them if you don't do this you

don’t have an opportunity to appeal. We -- we talk to them about their appeal opportunity coming at DOL when their recommended decision is offered and you can’t get there without giving this form up. So, yeah, we hear what we hear and it’s hard to put it into a full context of you know, is this widespread, is it perverse? I think one thing that I would say you know in -- in all of this I consistently hear things like well, they never said anything in the dose reconstruction report about X Y and Z that I told them about. And we’re -- we’re trying to do a better job at that, we’re trying to make sure that there is something in these reports that speak to the fact that the claimant raised X up, raised Y up and here’s -- here’s the -- here’s the way it’s handled.

DR. ZIEMER: The way it’s handled or why it’s --

MR. ELLIOTT: It may mean nothing to the dose reconstruction report but we have to say that. And I’d be the first to admit that we, you know, we have not done that in all the claims and all dose reconstructions over the course of this program.

Another thing we talked about with John and Arjun

in our technical conversation was I proposed that in these kinds of reviews where they're looking at a snapshot of a procedure in time it might be helpful for them to come at the program level folks and say to us we have a list of questions, we want to know the background, we want to know the history, what's the purpose of this procedure, how's it changed over time. And I think they would have benefited especially in this example from having that kind of discourse. And so I hope we can -- you know, we can -- the horse is out of the barn on this one right now but in the future I -- you know, I think John is amenable to that; maybe we can make that happen.

MS. MUNN: We seem to have dropped --

DR. MAURO: We discussed the possibility of just as --

(telephonic interruption)

DR. BRANCHE: Hi, this is Christine Branche, we had dialed in earlier and then when we thought we were unmuting apparently we lost folks on the line. Is Michael Gibson on the line?

MR. GIBSON: Yeah, Christine, I'm here.

DR. BRANCHE: Thank you. So sorry, Ms. Munn.

MS. MUNN: Yes we're -- we're twenty minutes into

a discussion on PROC92 and very sorry that we apparently cut you off. At the moment Larry Elliott is -- is expanding a bit on a great deal of the interaction that's gone on between SC&A and NIOSH over the last couple of months with respect to this particular procedure and whether we can or cannot improve upon it. Larry, continue?

MR. ELLIOTT: Well I think I was done and John was going to react but I can -- I can reiterate if you wish me to, I don't know if it's necessary. We have a record.

MS. MUNN: Not more than just -- no, a couple of sentences where we are and John then.

MR. ELLIOTT: Okay, a couple of sentences of where we are. I think I was remarking upon ways to measure dissatisfaction from this -- this particular procedure and process. I pointed out that we can look at the number of annotated OCAS1's as one measure, we could look at the number of administratively closed claims as another measure; however, I don't believe that that gave us a full picture of whether or not there's a pervasive problem here, a trend if you will, of dissatisfaction broadly disbursed across

the claim population. I offered that there were in our discussions, in the technical conversation that we had I suggested that this review might have benefited from an interaction with the program folks who have been instrumental in developing this -- this part of this procedure and this process and talking about how it's evolved over time with for example the fourteen grace -- day grace period would come out in that conversation I'm sure and might have led to a different conclusion. But at any rate, those were the -- in a capsulized form that's kind of where I was speaking from.

MS. MUNN: Thank you and John Mauro was ready to respond.

DR. MAURO: Yes, I -- we use that process namely on the site profile review. That is once we get through our first review by the team we usually write down a list of questions that we'd like to discuss with the authors of the site profiles and this is very helpful because it helps to clarify, make sure we have a complete understanding of the site profile. I think the -- I think the task three procedure reviews would also benefit from that step in the process. Now -- now, unlike --

but the procedure reviews, bear in mind there are a lot of them. Many of them are very, very specific technically but in this particular case though I think that this had -- this had a broader -- there were a lot of nuances to this and this procedure is run and it sounds like if we would have spoken to you about it beforehand and say listen, our understanding is this is how it works, is that understanding correct and complete and your answer obviously would have been no, there's more to the story here. And I think we would have really benefited in this case from that conversation. I think for -- we SC&A would propose that in the -- in the -- in the future on these procedure reviews that we do engage in some degree of dialogue with NIOSH before we publish on our web -- findings.

MS. MUNN: That would seem to be reasonable. Any other comments with this -- with respect to where we are and what's to be done here?

MR. ELLIOTT: I think those serve as our general comments and maybe Stu could go in and there were five findings here that we probably ought to speak to here.

DR. MAKHIJANI: Could I say one thing in regard

to Larry's remarks about the explanations in the dose reconstruction about what the claimant had said. In both -- in both the cases where there were difficulties in -- in this close out interview they both related to that particular problem. It may not have changed the dose reconstruction any but claimant in one case, the observed interview that claimant provided some very specific technical information then that didn't get back to the dose reconstructor to reaffirm, sign off that yeah we looked at this again and it doesn't make a difference or we made X adjustment. And the second case there was an incident and there was no notation at all about that and I think on both cases that was -- that was the heart of the problem from -- from the point of view of the reviewer.

MR. HINNEFELD: Yeah.

DR. MAKHIJANI: And so I think we have an agreement -- no, I think we -- we have an agreement about that.

MR. HINNEFELD: Yeah. Okay this is, well, I'll start down through the list of findings then.

MS. KIMPAN: Stu?

MR. HINNEFELD: Yes.

MS. KIMPAN: This, I just wanted you to know this is Kate Kimpan with the ORAU team with -- I'm online as well.

MR. HINNEFELD: Okay, thanks Kate. The --

MR. ELLIOTT: We ought to ask Kate if she has anything to offer.

MR. HINNEFELD: Well, she didn't hear our -- she didn't hear our earlier discussion because we weren't on the phone, so. Kate, at any time you feel like you want to chip some -- you know, add something to what I've said here please -- please jump right in.

MS. KIMPAN: Thanks so much, feel free to direct anything that you'd like me to respond to this way as well.

MR. HINNEFELD: Okay. The first finding was written that the closeout interview procedure does not ensure that the claim concerns are fully addressed and then it gives five, essentially supporting items under that. The procedure lacks specificity about when concerns are referred to the HP -- referred to HP reviewer or dose reconstructor, underlying data relating to claimant concerns was not examined in two cases, those were the two cases that we've been talking

about. Variable documentation of closeout interview process meaning that sometimes the interview -- closeout interview has a fairly extensive record of what was said and other times it doesn't. Substantive claimant information not addressed by dose reconstructor, again relating to the two cases that we were talking about. And HP reviewers lacked health physics qualification and dose reconstruction experience. So starting down these I guess in order I think the first one, the first supporting I'm hear about the procedure lacking specificity is a good -- is a good point. That's listed also I think as one of the recommendations, if I can toggle back and forth between documents here. The -- yeah, one of the recommendations is that the procedure should include instructions to the HP reviewers, should make detailed notes, I'm sorry, detailed notes. Anyway this -- the finding though relates to some specificity in the procedure about when to get the dose reconstructor involved based on what the claimant has said and we think that's worthwhile and we intend to do that based upon having some years of history now with what you hear in closeout interview, we should be able to

have enough sufficient information to know that these are the kinds of things you hear and in these situations the dose reconstructor needs to be consulted. So that doesn't seem like that, so yeah, we agree. Our -- our -- our purpose here is -- is to whatever we can do to improve the interview process we want to do that and you know, I can talk some specifics about these two claims if anybody's interested, but I think what we really want to work on is what can we do to improve the interview process and make sure that things like that and so that we don't have these situations.

DR. MAURO: Along these lines my -- my understanding is that when the dose reconstruction report does come out and it's given to the claimant, a lot of the granularity of this process is not captured. A thought that I had, since that ultimately becomes the document that informs them of whether they're going to grant it or not, the degree to which that document captures some of the bedside activity whether it be certainly the CATI is there but the degree to which let's say some of the dialogue captured during closeout, a follow-up was done,

perhaps even when we do refer certain issues to the -- I realize that a lot of that information doesn't really go toward the end -- end product, which is your probability of causation because in the end it doesn't rise to the level of having to redo the analysis. But the degree to which these kinds of interactions are captured so that the claimant would be apprised that yes we've taken your commentaries very seriously, these are the kinds of things we did by way of actions taken in light of the information you either provided as a result of the CATI or provided -- because you do, do that with the CATI in some circumstances but that's another subject. But now we're talking about the closeout process which might trigger some follow-up investigations. The degree to which that's done I would say that's another place where I think having a documentation in a product might give the claimant the sense of yes, they're really paying close attention to some of the things I expressed my concerns about.

MR. HINNEFELD: I think that's a good point and I think maybe as we proceed with our procedure change and process modifications that we're committing to here I think we can see what we can

do about that but you're exactly right, any -- any of these communications with people, the more that you can demonstrate to them that we heard what you told us, the better the product that we receive by this. I think that's a pretty good point.

Let's see, I think I talked about subpart number one, subpart number two is underlying data relating to claimant concerns not examined in two cases reviewed by SC&A. Again these are specific to two cases. I think the -- the point here is that getting sufficient -- sufficient information into the -- into the procedure and instruction to the interviewers and reviewers such that to ensure that the appropriate levels of information are referred back to dose reconstructor. I think certainly in the one case had the dose reconstructor been told hey there's this other in vivo result in the DOL initial case file that would have been addressed and may not have changed the dose reconstruction. But the dose reconstructor was upholding I didn't know about this one, let me see how that -- if that affects anything. I think certainly that would have happened and so I think we can solve this issue

by having sufficient direction about when do you need to get the dose reconstructors involved in the -- in these issues.

Variable documentation on closeout interview process, again, is something that we feel like we intend to work on and improve the direction to interviewers and reviewers to make sure that there's a more consistent degree of documentation of that. Substantive claimant information not addressed by dose reconstructor, I think that falls in with number two and what we're trying to accomplish in making sure that dose reconstructors see that information and address it. And -- and then there's a comment on HP reviewers aren't really HP's and so that's well taken and we think maybe a different name for that -- that operation or that title or that position may be appropriate. So, I think that would be -- essentially we feel like there's good stuff here, we intend to proceed in good faith and try to accomplish some things that will remediate these -- these issues.

DR. MAURO: During the interview, closeout interview, to what degree does the HP reviewer explain that that you know, he's -- he's really

there to obtain information to -- regarding the completeness of the process, that is -- that is receiving all this information. Does the -- does the -- does the claimant understand that the person that they are talking to really does not -- did not do their dose reconstruction and is not necessarily an expert on the dose reconstruction process, but is a bridge to the expertise?

MR. HINNEFELD: I'm not real sure how -- how much they disclose about that. Kate, can you weigh in on that?

MS. KIMPAN: Yes. The -- the -– at least loosely and I can get an extremely specific answer. John I do think it's clear to claimants in most cases that they're talking about their DR report but that this is part of the closeout interview process. Folks who are asked for their -- their any input or comments if they're satisfied with the explanation, I realize that we've been calling these folks a thing with health physics in the title and as Stu said, we'll change that but I -- I -- I do think it is clear John made clear to claimants that these are not the dose reconstructors, certainly not the ones that did their case on the telephone. It's made clear

that if there is salient information that a dose reconstructor will review that, that will occur as well.

MR. HINNEFELD: I think that took us through finding number one then.

MS. MUNN: So am I -- am I hearing that there is some thinking going on already with respect to terminology regarding what we commonly call HP reviewer up to this point?

MR. HINNEFELD: Yes.

MS. MUNN: We're -- we're changing that. Any suggestions so far as to what change that might be?

DR. ZIEMER: Well you need a generic title, something like technical reviewer or something like that that doesn't imply a -- and I'm not sure that's the right word but something that shows that there is a -- that they are reviewing it for some --

MR. HINNEFELD: Right.

DR. ZIEMER: -- issues. What -- what do they -- what do these reviewers specifically look at?

MS. KIMPAN: Well, we've contemplated -- this is Kate -- Larry one of the suggestions that has come from my folks and we certainly welcome input

from this group and direction from OCAS, but one of the suggestions would be closeout interview specialists so there's -- we do have on our team people who -- whose expertise lay with the closeout interview, distinct from the intake interviews. So, that would be just very clear, very specific and doesn't imply to anyone that it's a health physicist but rather a closeout expert.

MS. MUNN: That sounds reasonable. Do we -- do we have another person or a group of persons who are referred to as -- as claim reviewers?

MS. KIMPAN: We do not externally have that title here Wanda, but when you start using the words claims and examiners or reviewers, that almost always harkens to DOL. So one of the reasons that we stayed away from claim but calling it closeout interview is to stay unique to this NIOSH, OCAS process that we're part of.

MS. MUNN: All right. All right. The closeout expert sounds -- or closeout reviewer --

MS. KIMPAN: Yeah, closeout reviewer, closeout specialist, whatever you know we need to look obviously at you know, how we're going to make certain people look properly qualified but

closeout interviewer, whatever this group might suggest will -- we'll await Stu and Larry's direction after they -- they've heard the possibilities.

MS. MUNN: All right. It certainly from this perspective sounds as if the closeout terminology might be the better one to --

MS. KIMPAN: Agreed.

MS. MUNN: Yeah. Okay, sorry, Stu?

MR. HINNEFELD: Finding number two is that the --

DR. MAURO: Before we move onto finding number two --

MR. HINNEFELD: Yeah?

DR. MAURO: Do we agree then that this finding number one is in abeyance? In other words --

MR. HINNEFELD: That's my understanding.

DR. MAURO: It's probably a good idea to -- in other words, it's probably a good idea to -- in other words before we leave any particular finding let's assign it its new name.

MR. HINNEFELD: Right, that's a good idea. Okay, finding number two is the procedure makes no substantive provisions for ensuring that the claimant actually understands the dose reconstruction and its implications for

compensation prior to signing the OCAS1 form. You know, when the claimant doesn't -- complains they do not understand the lingo. There's actually two parts here; make sure they understand the dose reconstruction and make sure they understand the implications on the compensation. I think the second is easier to address than the first. The second case, you know, we NIOSH, don't really decide -- make the compensation decision and we have resisted saying -- telling claimants that your case is -- will be compensable or it will not be compensable. That decision actually is made by the Department of Labor. We might have some alternative language, I know why this is in here and it's because of one of the observed interviews from reading the description of the interview it looks pretty clear that the claimant ended the interview believing that they were getting it compensability -- they had a compensable dose reconstruction and -- and when it was not. So I'm sure that's why that finding is in here.

MR. ELLIOTT: Because the term claimant favorable --

MR. HINNEFELD: Because the term claimant

favorable was used in discussing them and they said oh well it's favorable, I guess I'm getting compensated was the connection they made. So I think that while we wouldn't say it appears that your case will be compensated or not, we may be able to say something like we were unable to show causation based on the information or we were able to show causation and -- and words to that effect. There may be -- and I just throw those -- those pop into my head, they've been vetted to no one, okay. So we are working to vet some words and see what it is we can reasonably say within the constraints of you know, what we it is we actually do, we don't actually make compensation decisions. So there might be some language that we can choose to be clear in our discussion without actually indicating we've made a compensation decision or even a tentative compensation decision. So there might be something like that.

DR. ZIEMER: And John I'd like to ask, in the finding where it says the procedure makes no standard provision for ensuring the claimant actually understands the dose reconstruction, that raises the question in my mind as to whether

it's our objective -- I'm not sure claimants will in fact understand a dose reconstruction; I'm not sure on a given case that all the Board members would and maybe not all the dose reconstructors would. But what did -- what was -- what is it that you think the claimant should understand? Is it something about how it's done or what -- what is it that's implied in this finding that -- that we can correct?

DR. MAURO: Well I'd like to pass that on to Arjun because it's a really tough question.

DR. ZIEMER: I -- I -- I know you're not -- you're not implying that the claimant has to understand how to do dose reconstruction. But -- but there are some facets of it that they need to be cognizant of so maybe Arjun, you can help me understand. I -- I -- I think intuitively I mean, I feel like I know what -- what the intent here is but I'm not sure it's the understanding of dose reconstruction per se that we're trying to get the claimant to sort of meet an understanding criteria at that point. What is it we need to -- what's the end point we're looking for?

DR. MAKHIJANI: Obviously you know, dose

reconstruction is hard in all its technical details and quantitative aspects and internal/external and we can't -- we can't -- it's hard enough for a technical person to go through that and understand it and Hans and Kathy will testify to that and have plenty of times. I think the -- the first step in that is what emerged during the observation is people are confused between the term claimant favorable dose reconstruction and thinking they're going to be compensated. That was a very unfortunate confusion and that seemed to get reinforced the more dose reconstruction is questioned and explained in the call the more the interviewer of course tries to say you know, this is all to your benefit and this dose was given to you and the other dose was given to you. And so I think some very clear way of saying even when we do claimant favorable dose reconstructions -- well the law is written -- Larry and I were chatting outside if I might bring that conversation in here in the room a more formal way. The law is written you know, for and a more likely than not proposition given the ninety-nine percentiles in the tables and so on, but still you have to have a significant dose

depending on the organ. And many can -- many cancer cases are denied because of the criteria set up under the law and even when it is claimant favorable, that piece of explanation would separate the dose reconstruction piece of it from the probability of causation piece of it and I think we did recommend in the report that NIOSH does have an idea of what the probability of causation is or whether it's compensable or not, the exact number is actually not very relevant. Whether it's likely compensable or not and with the caveats that the Department of Labor makes the decision and so on, going out of the closeout interview process it seemed that there should not be a confusion on the part of the claimant. Because if they go in thinking signing the form thinking they're going to be compensated and then get a non-compensation decision then -- then it's pretty bad. And I think there should be a very clear way to sort the things out. You suggested a couple of things in the review, Dr. Ziemer, that those may not be the best choice of words and may create, you know, legal issues or whatever and -- and -- it's for -- for Larry to say but something should be done.

MR. ELLIOTT: Well, our -- our reports -- the reports that we deliver, the language that is contained therein about whether or not the claim is going to be compensable, is guarded language, it's language that has been reviewed by our general counsel's office and been blessed that way so that we don't ascribe a decision to our work that is really DOL's responsibility to give out.

DR. ZIEMER: And which is premature in any event.

MR. ELLIOTT: Which is premature, especially in a non-compensable case. But if you look at a compensable dose reconstruction report I think the language is clearer there that the claim is going to be found to be compensable. But when we look at a non-compensable dose reconstruction report, it's nebulous, it's ambiguous, it's difficult to discern for a lay reader, what does this really mean, you know, am I going to get my money or not? And we just have to take your -- your suggestion, your examples back to -- to the desk and see what general counsel has to say about them and see if there's another that we can frame the language to make it clearer that we've done the best job we can in the most claimant

favorable way that we can with reason and -- and yet it's still going to fall short, we're sorry. We'll have to come up with something.

DR. MAURO: I have something too I'd like to add. Though that issue did not come up in the interview part, one of the things that's a recurring thing that we've all experienced in the evening sessions is that the folks in the audience and certainly the claimants who are being interviewed, don't understand how could you possibly do a dose reconstruction if you don't have adequate records from me or that the record's missing or they read our -- they'll read our audit report you know, of a site profile and disease problems. Now without getting into the nuts and bolts, they believe that the coworker model -- and the only reason I say this is from sitting in on those evening sessions. They believe the coworker model is the guy sitting next to them.

MR. ELLIOTT: Nobody called him.

DR. MAURO: And nobody called him.

MR. ELLIOTT: Nobody called him.

DR. MAURO: I -- I -- I think that a little bit of discussion that, about procedures that in your

particular case, in your husband's case or whatever, we had very limited data you know, and for that reason -- you know, for that reason it's difficult and this is what we did in your case to try to make sure that we reconstructed the doses in a way that you know, were fair and appropriate and this is -- and this is how we went about it. Now without getting into the details of the statistics but you know, we do have lots and lots of data from people who worked in that kind of job at that time period in this facility and looked at that data and looked at the people that had the highest exposures, I mean, you know where I'm going but I'm saying I could see the person at the other end of the line understanding that because you can -- you keep seeing it over and over again. You can't build a coworker model, how could you -- the guy standing next to me, you know, so I -- I don't know whether this is a place where you could I guess from a grass roots point of view, start the process of gaining the confidence that the coworker models can be used and how they -- and they can be used very productively.

MR. ELLIOTT: There are several communication

issues here intertwined. That's one John. I think another one is a much larger issue, a wider spread perception that dose reconstruction is something that we -- it's something they see it different than the way we see it. We see the language of the law saying there needs to be a dose reconstruction program because there's data that was -- monitoring data that was lost, monitoring data that was not taken, you know, data that was not kept or it was modified. That's what dose reconstruction is designed to do is to fill the data gaps, fill the information holes and they're coming at it from well you've got all the data on me and you're reconstructing my dose, that we need to do a better job of communicating what dose reconstruction really truly is, it's filling holes, filling the data gaps, it's bridging the lack of information and that's what the law requires us to do. I don't know if that's going to gain us any favorable ground with these folks but I just see there's a number of communication issues here, you brought up one, I just offered another one.

DR. MAKHIJANI: There's a third piece to it too where the data gap piece is very direct for

external dose, it's not there sometimes you may have a period of non-monitoring or missing badge or a bad badge or something. The internal dose of course is more complicated because the intakes were never actually calculated until 1989 or something. So you're actually having to interpret the data and calculate the intakes almost from scratch, essentially from scratch, you have the bioassay data in the best case but still it takes a lot of interpretation and work to calculate that dose, it's a non -- non-trivial exercise --

MR. ELLIOTT: And a set of numbers they've never seen before.

DR. MAKHIJANI: That's right. And the external dose I think everybody understands, they've got the badge reading, they've seen them quite often over the course of their employment but the -- the urine data is -- has been a black box to them from day one, they've given these samples and they have no idea what happened to them.

DR. MAURO: Yeah, yeah.

MR. ELLIOTT: And here they get something back from us that says, your internal dose to organ X was... You know, how can you get there? We

don’t believe that.

DR. MAKHIJANI: I think that is a very big issue because you’re doing that for the first time and they never saw that in the course of their employment.

MR. ELLIOTT: I think there’s a -- recognizing these communication issues there’s an opportunity for us to look at the scripts, look at the communication language that’s used in these closeout interviews and in the CATI interviews as well and see what modifications and revamping we need to do to that.

DR. MAURO: And I’ll say this is not an easy job for the closeout specialist.

MR. ELLIOTT: Oh no, they do a heck of a job given what challenge they face.

DR. MAURO: Yeah, this is a tough -- yeah, ‘cause I -- I mean if I put myself in the situation if I was trying to -- in fact sometimes I do find myself a claimant will call up and they’ll be very upset and I’m not quite sure how to ease their mind. But it’s -- in order to communicate that -- that step, that is listen yes, we don’t have -- we didn’t have data for your husband but this -- this is what we did. Now how do you

explain that in a way that they get a degree of comfort? Yeah, these folks --

MR. ELLIOTT: That you did it right and to their benefit.

DR. MAURO: And that's all I'm just saying. I sympathize with the difficulty in trying to get that message across. But if it can be gotten across and it's going to be -- it's hard for dose reconstructor to you know, never mind the HP closeout -- the closeout interviewer who may not, I don't know how intimately familiar he is or she is with that case. That's probably an important point, in other words, you have to really understand the case so that you could communicate to the claimant what -- you know, what was done conceptually here, that was special and that we -- that we -- case specific as opposed to let's say just giving certain boilerplate explanations.

MR. ELLIOTT: I don't know if Kate wants to speak to this or not but I do believe that what my understanding is, is that those folks in her shop that do these closeout interviews prepare themselves before they conduct the closeout interview, I hope you saw that -- as part of the process they look at the file. They also have --

and these are the HP reviewer types, but they also have I believe a Health Physicist who is in that -- that group that can be brought to bury.

MS. KIMPAN: Yes, that's absolutely true, Larry.

MR. ELLIOTT: Yeah, okay.

MS. KIMPAN: There also is -- I'm sorry, shall I?

MR. ELLIOTT: Go ahead.

MS. KIMPAN: There also is at their availability per task five under Ed Mars* leadership the ability for the people who are helping with that call line to get to the actual dose reconstructor or actual expert from that site in real time as well.

DR. MAKHIJANI: Well, this actually -- this actually we didn't -- we didn't find that and that was -- there was quite a bit of commentary on this point in our review is on the -- on the HP -- see we had -- we didn't essentially have too many issues with the first step of the closeout interview, we thought that the claimants were dealt with very politely and you know, people tried to explain as best they could and so on. There were issues of not understanding that I think are -- we all acknowledge are difficult. But the major problems arose with when the thing

is referred to the HP reviewers and what happened and the fact that no one on the HP reviewer team was an actual health physicist or familiar you know, then the HP reviewer looks at the case and none of them were -- the two managers had some health physics experience in that degree so they were aware of dose reconstructions and they understood them and they had a level of technical proficiency that -- that we were comfortable with or at least I personally was. And -- but they don't actually review the case, they're the managers and the -- the -- but there's no health physicist or dose reconstructor on the team, they get involved at a second stage. At least that was our understanding and that was what was told to us during our communication with the managers. Maybe it's changed or wasn't quite correct.

MS. KIMPAN: This is Kate. HPs get involved as they are needed, it can be during a call, it can be immediately after a call, it could be with the reviewer in advance of a call in preparation. So I'm not certain what your conclusion that they're not available was based upon, but that's less than accurate.

DR. MAKHIJANI: No, no, we didn't conclude that

they’re not available in general. We -- we did say they’re not available in real time during the closeout interview because that’s what -- that’s what’s in the procedure first of all, they’re not -- the procedure doesn’t specify availability. Secondly, that we were also explicitly told that the dose reconstructor never actually directly communicates with the claimant, never. And that they -- they communicate with a health physics reviewer when the health physics reviewer refers the case to the dose reconstructor or somebody in your dose reconstruction task, which is task four or five?

MR. HINNEFELD: Five, five is dose reconstruction.

DR. MAKHIJANI: Five. And so that was our understanding. We did document our exchange on that point with ORAU team and ORAU team did review that documentation and sign off on that. So that -- I think Kate -- maybe a review of that documentation from your team’s side again might be -- might be useful because your team did sign off on that.

DR. MAURO: I -- I -- I have one more thing I’d like to add. In thinking about this and putting

myself in situation, when -- when you're talking to a claimant the most important thing I could see the closeout interview folks -- folks doing and it doesn't require a sophisticated background in doing the dose reconstructions. They're probably going to zero -- when I look -- the dose reconstruction reviews I've done, when I look at them I say, okay, what -- what was the driver here? You know this person's problem was basically some neutron exposure, I mean, well two or three that really were important because of his job. And all of a sudden you make it personal, in other words explaining to -- I don't know if you do this, explaining to the claimant that for your husband we look at -- we took a very close look at his records, his operating history and so on and now where we come out is that -- that the situations that caused him to get some exposures were as follows, and we had a problem. We -- we -- we had pretty good data on -– bioassay data, but we didn't have very good neutron data so our real problem in your case -- so in other words if you had -- if all of a sudden you're talking about that case and the places that -- your under -- your understanding

and appreciation of that unique person's situation and what we did to uniquely address that person's condition or problem, I can't tell you I know so I can talk to your doctor or when they bring it home to you, this is you, we're looking at you now, I don't know how much of that is done and it's going to be very difficult for the closeout interviewer to do that unless he was involved. But I -- but I think that -- if he -- if that person does enough of this and is close enough to the process he could appreciate where the -- where the real issues were for this particular case. The degree to which that could be communicated to the claimant, that's -- this personal treatment is what happened here and it always does happen by the way when we look at these cases, this is -- these are tailor made very often. And I don't know, I'm just making an offer that I don't know whether or not that is brought into the process. But the degree to which that's done I guarantee you it will engender a lot of confidence.

MR. HINNEFELD: Yeah, to an extent we can, I mean that's -- that's a pretty tall order, that specific kind of communication at that point.

DR. MAURO: Yeah, yeah.
MR. HINNEFELD: Paul?
DR. ZIEMER: As far as the claimants' understanding of the dose reconstruction process, I think we clearly don't want to wait until the end of things to get into that, it needs to start further and I think you do supply some early on descriptions of what is going to happen.
MR. ELLIOTT: Our acknowledgment packet includes fact sheets about dose reconstruction --
DR. ZIEMER: All right and how it's done and so on. I don't know to the extent to which those are read or could be referred back you know in the closeout to remind the person that this is explained and this is what we do in cases where there's missing data and so on. But it seems to me that -- that sort of educating the claimant it starts at the beginning --
MR. ELLIOTT: It has to be a continuous process.
DR. ZIEMER: A continuous process and we can't just be relying on the closeout. There may be some way to tie that together to remind them.
MR. ELLIOTT: Okay, well --
DR. ZIEMER: Because they have some written information as I recall that in fact you made a

concerted effort to make that lay understandable even.

MR. ELLIOTT: See, it comes at them in several different forms --

DR. ZIEMER: Right.

MR. ELLIOTT: The acknowledgment packet, but there's activity reports and we offer up bulletins.

DR. ZIEMER: Right.

MR. ELLIOTT: And then the dose reconstruction report itself under the current format, the whole front end of it is an explanation.

DR. ZIEMER: An explanation of what was done.

MR. ELLIOTT: Yeah. But you're right, it needs to be --

DR. ZIEMER: Then if you're going to personalize it as John said you can say now in your case this particular one applied where you know, we had to rely on source term data, whatever it is then we call attention to it somehow. Because I think there's a lot of information out there that maybe doesn't get digested because it still looks pretty technical I think even to lay people and they'll probably, say well, this is -- this is sort of like when I get -- when I get my Lipitor

I get this fact sheet and there's no way I'm going to read this fact sheet unless I have a problem.

DR. MAURO: And then you take --

DR. ZIEMER: Yeah.

MS. MUNN: And there also continues to be some very basic information about radiation and radiation effects that are commonly misunderstood by lay people. There is sort of an understanding that any exposure is potentially hazardous and may result in certain cancers and that -- that perception is probably not often addressed in the other action that we have and that others have with the lay people. I don't know whether there's --

DR. ZIEMER: Well you know, the technical community has been trying to solve that one for as long as I can remember.

MS. MUNN: That's true, and have been notoriously poor at doing so.

DR. ZIEMER: Everybody thinks that somewhere along the lines somebody is going to come up with a magic set of PowerPoint slides that will cause the whole nation to change its view and it's not going to happen.

MS. MUNN: No, it won't.
DR. ZIEMER: If the opposite gets reinforced by Jack Bauer reinforces it on 24 it will be --
MS. MUNN: Oh, he's not alone. There's not a program on any entertainment medium that I know of that doesn't reinforce that but it's -- I don't -- it's hard to identify whether that issue is even one that should be addressed in any of this but somehow it seems listening to the claimants in workshops and things of that sort --
DR. ZIEMER: Well see it's inherently built into our program. We're saying that there's some probability of damage at any exposure. It's sort of based on that premise, you've got to get to the threshold at that point of compensation. That part of it I think I'm not sure what we do on that, I don't think we...
MR. ELLIOTT: I think, if I could take us back to another issue that we talked about earlier this call for and need to have a health physicist at the ready to enter into the dialogue with a claimant about how a dose reconstruction was performed or why a certain claimant offered issue, will or will not make any change in dose estimation. We have -- I think we and ORAU have

tried to make sure that the dose reconstructors who are actually doing the business of doing dose reconstruction are somewhat protected and allowed to just do that work alone so that you know, we can get the product done. That's not to say though in my mind that there's not some other way that we can you know, maybe rotate people through this experience of dealing with claimants. I think it would be good actually.

DR. ZIEMER: Maybe not the person who did the dose reconstruction, but somebody --

MR. ELLIOTT: Not the person who did the dose reconstruction but a -- a health physicist who has, you know, done dose reconstructions. Maybe -- Maybe you could have one on call for a given facility and when an interview is done that person's made aware of that call, books up on the claim and then stands at the ready to deal with those kind of questions. You know, there are those kind of approaches that we haven't -- we haven't talked about we should talk about you know, with our contractor. I think there's ways that we can -- we can modify and improve our -- our process here looking at it that way.

MR. HINNEFELD: Yeah, I think real -- real time

is always problematic because a dose reconstructor who's not -- has not studied up on the -- on the claims that are being called when you first open the dose -- when you first open the file it's not immediately apparent necessary -- necessarily. It takes a little looking at the file to understand how it was done. So, I hope this is real time even not necessarily the dose reconstruction but a dose reconstruction real time is a little hard to -- hard to do a logistic just because it's not -- it's hard -- you can't just open it up and know immediately what was done.

DR. MAURO: But -- But -- But the truth -- But I have experienced that. Once you do four or five handfuls, several AWEs or several --

MR. HINNEFELD: I guess that's true.

DR. MAURO: You know all of a sudden you -- you know, I could pick -- I -- I tell you I could pick it off in an hour.

MR. HINNEFELD: Yeah.

DR. MAURO: In an hour, it takes an hour.

MR. HINNEFELD: If it's the same --

DR. MAURO: To say okay, I understand this site, I understand that site, I've looked at it enough

and then when you look at that case it'll take an hour or so for you to say I think I've got it, I know -- I know where the buttons are here. So if you haven't though, if you're not familiar with the Hanford site and have not done dose reconstruction of Hanford, it may take you a week to get -- warm up to that one.

MR. HINNEFELD: So it's -- and then the individual, you know, the actual dose reconstructor who did the dose reconstruction could very well have done it weeks earlier and has done dozens in the meantime. So it's still --

DR. MAURO: Yeah.

MR. ELLIOTT: But still --

MR. HINNEFELD: Still got to book up for it, so yeah.

DR. MAURO: Yeah, you still have to prepare.

DR. MAKHIJANI: I think Larry's idea seems to be you know, creative kind of dealing with the logistics of keeping the dose reconstructors insulated and also doing their job and moving the claims through. But I think some contact with claimants would be helpful and if you could ro -- consider rotating people through. I think in

most cases, I don't know, this is a guess obviously, the claimants don't necessarily want to talk to a dose reconstructor, in most cases everything can go smoothly or things can be referred to a dose reconstructor or -- or health physicist or for later dealing with claimants. But the idea that there may be somebody available may be very useful.

MR. ELLIOTT: Why not -- I mean another way to change this or to correct it would be an organizational change in that team unit and if you add a position as a health physicist then that person's only job is to deal with the interviews at hand for the day and make sure they're ready to respond to issues that are brought up you know, impromptu, from the claimant. I just think that would be -- that's not the way to go I think 'cause – 'cause I don't believe that a position so created would be fully employed. I think there -- you know, we need to have somebody at the ready, but you're probably going to be booking up and then not even get called that day.

DR. ZIEMER: Well you have no guarantee that, that will help the situation at all. There are

many technical people that will make it even more confusing --

MR. ELLIOTT: Well there is that.

DR. ZIEMER: Because they will be so technically correct.

MR. HINNEFELD: Why are you looking at me when you're saying that, Paul?

DR. ZIEMER: Well I'm trying to get inspiration from your look to see whether I'm on the right track here, or it's like you always have to have people who are teachers and they're -- and I know some really good technical people and they are the worst teachers in the world.

MR. ELLIOTT: It takes a special personality to do what these folks do.

DR. MAURO: I -- I suspect your closeout specialists have those skills and it just -- they may have to put in an hour or two on their own or maybe even talk to the dose reconstructor and say okay, tell me about this dose reconstruction, give me a little more personal touch. And he could -- he probably do -- once he has it because really we're looking at the big picture. You don't want to get into the OTIBs, you know, you want the big picture. Where are the pressure

points on this one and where are the problems, where are the challenges? And I guarantee, I just feel that the specialists who are talking to these people they're probably really good at it and all they need is a little bit more information regarding that case and when they're on the phone with that person I guarantee you that person -- you'll be able to hold that person's hand a little better, walk them through why we had to do what we did. Sure you want to have the dose reconstructor on call if you need them but I think there's an awful lot the specialist can do.

MR. ELLIOTT: I think this is a good discussion.

DR. WADE: See one of the things it always comes down to is resource expenditure within a limited resource mix. I mean it's tough. There -- There are certain fundamental issues that -- that -- that exist; John hit on one of them which is how can you reconstruct -- how could you possibly reconstruct my father's dose when -- when there were records missing? I mean there -- that's a fundamental question that no matter how skilled you are, you're not going to answer. The other thing we hear all the time is that I worked there

and I got cancer, there's no cancer history of cancer in my family. What -- How are you -- you're not going to explain it. You're just not going to explain it. So the -- the question is deciding those areas that it's worth making additional investment in. Now, it seems to me from listening to all this that -- that getting the communicator a bit more up to speed on the case is a good thing. And maybe, I don't know, they -- they probably have dealt with these sort of gut issues like how -- how can you reconstruct my dose when you don't -- when there's something missing. I don't know if they're prepared to talk about those things or not. But again you're never going to get this completely right unfortunately and -- and there's work to be done and that's the dilemma here. It's a tough one.

MS. MUNN: But whether the information that is given is completely accepted by the claimant, it still seems to be incumbent on all that are involved in this process to repeat at every possible opportunity that all the best science that is known leads us to the information that it is not necessary to have had a background of cancer in your family for you to have had one and

it is not necessary for -- for this -- for anyone to believe that you would not have had cancer had you not worked at this position. That's -- that's -- those are realities that whether they're acceptable or not it appears necessary that we repeat those realities.

DR. WADE: I think that's something to think about. One last comment because I think this is one of the main issues remaining and what -- what encourages me so much is you've got the SC&A team now who is completely vested in this and cares deeply about these people and has experienced something and now you're at the table with the NIOSH ORAU people who are completely vested and care about this and this is the best group in the world to imagine a path forward but there's no easy path forward. But -- so this is a very important discussion. Where it goes I don't know, but these are the right people to be talking about it anyway.

MS. MUNN: Where it goes is the problem for me because I'm not certain what action comes out of this discussion of our -- our item two. We have talked about being in abeyance and some language change with respect to title but --

DR. WADE: I'm going to -- and I'll speak up more than I should. I think one of the things I'd like to see happen is upon reflection I'd be very interested in what SC&A thinks should be done. And I would be very interested in NIOSH's reaction to that and very interested in the Board's reaction to that. Again, we all care about this and again, this is -- this is a time when we each need to speak, the other listen and then -- and then move forward. So I'd be very interested in SC&A's reaction.

DR. ZIEMER: One of the reactions and I think it's a good one John suggested in making sure that needs are personalized in the sense of saying in your case this is what was looked at and this is how something was valued. I think that's got to be part of it. To some extent it already is, but to the extent to which the person feels like their issues aren't being dealt with it becomes very important. Secondly, I think changing the nomenclature will help to the extent that the reviewers are not being challenged as being something they're not. And if they face an issue which is beyond their technical capabilities they ought to be in a position to

say I'm going to go back and make sure that, that question gets answered for you, but I can't answer it directly, but I'm going to get a dose reconstructor who will provide that. There's no reason that we have to be able to answer everything.

MR. ELLIOTT: And the clock is not ticking on the sixty days for you to turn the OCAS1 around.

DR. ZIEMER: Right.

MR. ELLIOTT: We'll get back to you.

DR. ZIEMER: Right, right.

MR. ELLIOTT: There's no pressure here on you to turn over your OCAS1.

DR. MAKHIJANI: That I think -- those -- those things I think would -- would mitigate a lot of understanding.

DR. ZIEMER: A lot of them, I mean there's a number of things that have come out here I think that in ORAU has heard them and NIOSH has heard them and it seems to me that in some form could be incorporated maybe on a trial basis to see if they improve things.

DR. MAKHIJANI: Well, and the third thing I think that Larry said that I thought was very helpful was that to go you know, understanding that the

legal counsel of HHS has signed off on this language that's quite vague in the case of denials or likely denials, that some more clear way of communication that would pass legal muster would be very good. I think -- I think that -- that would prevent a lot of the misunderstandings that do occur, at least from the observations that we have. I think those three or four items would -- would fix what's fixable, I mean.

DR. WADE: Maybe that one issue -- I mean maybe there are three actions that have come from this that NIOSH is going to take to heart.

MR. ELLIOTT: I think that we've committed to them here in our responses and we're saying that we're going to look at the procedure and revise it accordingly. You know, I think what needs to happen is we need to do that and bring back the revised procedure, tell you how we're going to improve it based upon these comments that we've -- we've heard.

DR. MAURO: I have one more thought that I wanted to pass on and that is when the -- at some point in the process is there any provision to get feedback from the claimant? Do they feel as if -- and this may even be after the -- after the

adjudicated decision is made. Do they feel as if that their claim -- and did we say we have twenty thousand adjudicated claims that have been processed, about twenty-five percent have been granted and about seventy-five percent you know, some -- certainly large factors still in the process but some a larger fraction are not. One of the -- I mean they always say if you don't measure it you really don't know, is there any way to get -- are you getting some kind of feedback on the degree to which they feel as if their claim has been processed? Is there -- is there a unanimous dissatisfaction amongst all the people that were denied or is there a substantial fraction of the people that were denied that feel no, I think you guys did the best you could and we accept your finding?

MR. HINNEFELD: Well, I don't know because we -- I don't know that we've measured it.

MS. MUNN: I'm not sure how you could measure that kind of thing.

MR. HINNEFELD: That would be --

MS. MUNN: With any kind of specificity.

MR. HINNEFELD: If in fact you wanted to get that feedback after adjudication.

DR. MAURO: Yeah.
MR. HINNEFELD: Boy, that would be another --
MR. ELLIOTT: No, I don't think that --
MR. HINNEFELD: That's not something we just do casually. I'm not saying it's not a good idea, it's not something we can do casually though I mean because then you're collecting information from thousands of people and the government normally doesn't like you to do that.
DR. BRANCHE: Does the Department of Labor have it in its bridgement office?
MR. ELLIOTT: That only deals with party supposedly.
DR. WADE: But even -- even if you could get it, what would you do with the answers?
DR. MAURO: Well you'll find out whether or not the kinds of things we're talking about as we've put it into the program and do a little bit more of these kinds of things, are they -- are they reaping benefit?
MS. KIMPAN: John, this is Kate.
DR. MAURO: Yeah?
MS. KIMPAN: The only research I know on this topic was conducted by the Upjohn Institute in Michigan. It has to do with claimant

satisfaction and worker's compensation programs which this is one and the finding was and it's singular, it's not been replicated a lot in my observation, was that claimants did not appeal their work comp cases based on a positive and negative outcome. They appealed based on whether they quote believed they had been heard or listened to.

MR. ELLIOTT: Was this program included in that review, Kate?

MS. KIMPAN: Absolutely not. This is the only research I know of that type, Larry.

MR. ELLIOTT: Well we -- we would have seventy percent of the twenty-thousand that have been processed you know in a category that have been denied, seventy percent.

MS. KIMPAN: Right.

MR. ELLIOTT: And of those seventy percent I have no idea how we could gauge the level of satisfaction -- one way we could tell you what our good letter file looks like, it's about this thick. We could tell you what our bad letter file looks like and you know how that goes. We can tell you that we hear loud voices from a few. I don't know where we go to try to -- you know,

we can't -- OMB won't let us go back and do a follow back on the claims that have been adjudicated without having an OMB approved package to do so and that'll take your guess is as good as mine, you and I may be retired before we get that approval. So, you know, I --

DR. WADE: Even then, I mean, even if you could do it -- I'll accept your fact that in a process controlled world you could say if I had that kind of mechanism to gather feedback regularly I could tweak the system and I could look for change in my tweaks. I mean that's a good thing, but -- but that's not here, that's not the way this is going to work. You might be able to get one snapshot of it, but you're certainly not going to be able to control the verney (ph) on the process.

DR. MAURO: Well, you know I was looking at it more from the point of view is I like after I go and I rent a car or have some work done on my house and then all of a sudden the person calls you back a week later and said, listen, are you happy with the work? See, I like that and I feel good about that, all of a sudden I'm -- I'm -- I'm -- you know. This is almost the same kind of

thing.

DR. BRANCHE: Is it? People aren't buying your product.

DR. ZIEMER: I don't -- I don't agree with that actually. No, because you pay for a car rental or a truck rental.

DR. BRANCHE: And you got to choose from whom you could purchase.

DR. MAURO: After I finish the pro -- well --

MR. ELLIOTT: You went into it expecting a quality successful response to your need.

DR. MAURO: Yes.

MR. ELLIOTT: I don't know what these people expect. They expect to be compensated.

MS. MUNN: Well most of them expect compensation; I suspect otherwise they would not file a claim.

DR. MAKHIJANI: There's another level of problem with this proposal I think, and I'm thinking out loud like everybody else. You know, people who are being denied, many of them already feel very aggrieved and aggravated, the process is very difficult and then you're going to be contacting them in a way that's not going to benefit them in any way. Their case is already closed, it's been settled, they have an appeal, and now you're

making them go through another hoop for your own, you know, the government coming back into their lives to hassle them one more time.

MR. ELLIOTT: I think it almost expect what you hear.

DR. MAURO: Okay, never mind.

MS. MUNN: Well I have three items on this particular review segment that include SC&A taking a look at this offline and getting back to us with some suggestions about what the contractor feels might be done to improve things with a NIOSH taking a look at whether or not some revisions to the procedure would be helpful and the OCAS language change, possibilities on that one. But we can probably discuss this most of the afternoon.

DR. MAKHIJANI: Ms. Munn, do we have a to do item before NIOSH revising that procedure or our suggestions?

MS. MUNN: We're not -- we're not talking about revisions.

MR. HINNEFELD: Well, there is a -- we are talking about revising the procedure to incorporate some of these things.

DR. MAKHIJANI: Yeah, I heard you are saying, do

we have something to do to communicate --

MR. PRESLEY: Yeah, I don't think you're going to revise that procedure. This is Bob Presley, until you get some recommendations back, are you?

MR. HINNEFELD: Well, they sent us -- I mean --

MR. ELLIOTT: Yeah, we have the recommendations --

MR. HINNEFELD: The report includes recommendations for improvement on each of these findings.

DR. MAURO: Yeah, right.

MR. ELLIOTT: We've found some of those to be very, very beneficial, we want to do them.

DR. MAURO: This is -- this was triggered by Paul, one of the items you have mentioned, it seems like you hooked onto the idea of personalization. Now I don't know whether or not we've captured that in any of our recommendations or not but I guess over and above the recommendations that we've made we have had a chance to cogitate on all this and there may be certain items that come out of this conversation that maybe we'd like to supplement our recommendation.

DR. MAKHIJANI: That -- That'd be --

DR. MAURO: That's -- an action item I would yes we will supplement our recommendations based on some of the ideas we've discussed around the table today such as personalization.

MS. MUNN: All right. I think the next item may have already been fairly well covered by what we have been discussing, finding number three.

MR. HINNEFELD: All right, finding number three is --

MR. ELLIOTT: Variable documentation --

MR. HINNEFELD: Signing the OCAS1 form.

MS. MUNN: The OCAS1 form.

MR. HINNEFELD: The fact of signing the OCAS1 form if it's not been signed before occurs in the context closeout interview may create pressures on our own personnel to get signature. You know, you can speculate to that, we don't believe it happens. We believe that the interviewers tell claimants don't sign the OCAS1 if you've got questions because we're going to answer them. The fact that yeah, we do want to make progress but at the same time, you know, this is a step in the process and I don't know that there's any particular pressure felt by the interviewers. They don't have a quota you know, get so many

OCAS1s this week, so there's -- I don't know that there -- I don't know how you -- we don't believe that's the case, we don't believe they're pressuring for production.

DR. MAURO: I'm going to take responsibility. When I read the dialogue that was written up, question, answer, question, answer, I said and -- Arjun and I spoke on the phone I said you know Arjun when I read this and then I'll take -- I read it as if this the person on that end feels a degree of pressure to get this form filled. Almost to the extent that they feel as if that's the real reason for making this call. And -- and -- and anything else that would divert from that, but maybe I have to slow down the process a little bit, they'll talk to the dose reconstructor; there's a lot of things that have to be done and that could take some time. I got -- I mean, I'm just telling you when I read that dialogue, not any of the written around, just the dialogue I got the sense that, that was what's happening, at least in that case. You know, what can I say, that's what I came away with.

MR. HINNEFELD: Well, I -- I can -- I don't know, I -- of course I didn't listen to the interview,

I read the transcripts and the report. I guess arguably the interviewer referred to the OCAS1 more than you would have liked in that context. But of course in that interview -- we're also reading that interview with the knowledge that there should have been a pursuit of other information. This is -- this is the one where they went through the follow-up interview, right?

DR. MAURO: Yes.

MR. HINNEFELD: We're reading it with the knowledge that they're really -- this guy should be looking for that new piece of information, should be asking the dose reconstructor about that new information and he keeps asking her about the OCAS1.

DR. MAURO: That's correct.

MR. HINNEFELD: So I think our knowledge of the situation may influence our reading of that -- of that -- of that interview a little bit. I just don't think it's a -- a -- a -- an endemic issue. I don't think it's one that happened. I don't think it's one that we do. I don't think interviewers feel that pressure and --

DR. ZIEMER: There's no incentives put out for them to get the closure on anything. There's no

rewards.

MR. HINNEFELD: No.

MR. ELLIOTT: We could look at this as an example and say make a modification here that when -- when the claimant raises up an issue that needs to be referred to a dose reconstructor you should dispense with talking about the OCAS1 at that point. In fact you should say okay, fine, we're going to hold -- you're not under a sixty day clock to get us the OCAS1, you know, there's a whole new script that comes to play in the dialogue.

DR. MAURO: I like that.

DR. MAKHIJANI: I think this would solve the problem because I think that Stu is right that in the background we do you know, I didn't think of it that way before, but it -- it may color how we interpret the conversation. Where if you feel as I do and honestly I did feel that that matter --

MR. ELLIOTT: Well I could see how the claimant would feel that way.

DR. MAKHIJANI: Yeah.

MR. ELLIOTT: Wait a minute, I've just raised an issue with you and you're still beating me up about signing this silly form? I want to hear

back from you all about my issue. I'm not going to sign your form until you give me my issue. And so I could -- you know, I could see how this could be perceived.

DR. MAKHIJANI: Yeah. I think that if the clock were stopped until the specific substantive issue were resolved, I think that would -- that would -- that would resolve the issue.

MS. HOMOKI-TITUS: Larry, this is Liz Homoki-Titus. I'm sorry to interrupt, I just want to be sure that everyone understands the time frame here. Changes to the script are probably going to have to go through OMB approval again. So we want to be sure that we have kind of everything together and everything finished before you all send it up.

MR. HINNEFELD: We don't have a script for the closeout interview.

MR. ELLIOTT: We don't have to give a script to OMB either.

MR. HINNEFELD: No, there's no script. A script is for the beginners, the initial interviews, CATI, the CATI. But there's no script on a closeout interview.

MR. ELLIOTT: The OMB involvement here is on the

CATI interview questions, a computer assisted telephone interview questions. There is no OMB approved document used in the closeout process.

MR. HINNEFELD: Right. This closeout process is not designed to obtain information from people, it's designed to explain to them what was done in their dose reconstruction. Since it's not designed as an attempt to collect information I believe that's probably why -- well, A, there is no script and B, since we're not collecting information from thousands of citizens, OMB I believe is not involved.

MR. ELLIOTT: The scripts I'm mentioning are standard communication messages that we use in instances where people hear a claimant raise this up, direct a comment -- comment in this way. It goes to our public health advisors, it could find its way into a closeout interview as here's the standard response if that question is raised or if that concern is raised. That's the script I'm talking about.

MS. MUNN: So this is essentially a memorandum or training information.

MR. ELLIOTT: Yes.

MS. MUNN: That needs to be conveyed and --

MR. ELLIOTT: Well when you face this set of circumstances in an interview this is how you handle it.

MS. MUNN: Correct. And so our action item is to see that this information is transmitted to the people who do the closeout interviews, right? I'm not sure exactly what the formal method of assuring that that information is transmitted.

MR. ELLIOTT: I think it goes to the revision of the procedure to a certain extent, right? The revision of the procedure should attend to that to a certain extent. It may not present here's the communication message but it would have to say at least if the claimant raises an issue this is the step you take next; take these steps. You say fine I'll do -- that -- that is a substantive issue toward dose reconstruction I'll have to get a health physicist to advise on how that should be handled. The clock on the -- on the sixty day time frame for you doesn't -- is not ticking and you don't have to worry about your OCAS1 right now. Those are the steps that you know, we need to incorporate into this procedure right now.

MS. MUNN: And so we will see from NIOSH the suggested change in the procedure that will

address this. Good.

MR. ELLIOTT: You may or you may not see the communication scripts I was referring to.

MS. MUNN: Yeah, I understand that. The procedure will do it; that's all that's necessary. I have urgent requests for a fifteen minute break. We will reconvene in exactly fifteen minutes.

(Break from 2:33 p.m. until 2:46 p.m.)

DR. BRANCHE: Hi, this is Christine Branche and Ms. Munn is ready to start again. Is this line open, I just want to make sure? Someone could let me know that they can hear me.

MS. KIMPAN: Kate Kimpan can hear you.

DR. BRANCHE: Thank you.

MS. MUNN: We're beginning item number four, procedure 0092, procedure does not ensure claimant has all the information that was essential, and NIOSH, response?

MR. HINNEFELD: Well this is -- this is a little more difficult to accommodate. All the information that was essential to the dose reconstruction is really a lot of information. I mean that's really voluminous. The -- you're talking there could be site profiles which are

available on the website but you know, that's asking a lot to tell them you know, go look at the website. If you had the site profile, figuring out how that relates to your dose reconstruction is pretty difficult. Even the DOL response when we ask if it's a claimant who's been monitored and DOL provides us exposure records.

MR. ELLIOTT: DOE.

MR. HINNEFELD: DOE I mean. The DOE response when you get an exposure record from DOE they -- some of those run over two hundred pages so --

MR. ELLIOTT: And they don't contain -- in those entirety of the two hundred pages may not -- may contain other individuals' dose information.

MR. HINNEFELD: Some might. Some might.

MR. ELLIOTT: So there's a redaction issue that we would face there.

MR. HINNEFELD: Yeah. So this -- this is kind of problematic and -- and so maybe -- I don't know what to propose here. Maybe if you've got some specific ideas about what is it that would help the claimant the most. You know one thing that has occurred to me if the dose reconstruction would say the exposure record we received

indicates that you were monitored from this date to this date, you know something like that, to tell them what -- how to complete the record. And that your dose was recorded as such -- you know, this was the dose that the DOE reported to us. Things like that and then you have to really kind of specify whether you're talking about external or internal but there are a few -- a few categories of information you could provide perhaps in a dose reconstruction that would allow them to have some idea about the information that was used in their dose reconstruction. Kind of addresses this to a certain extent. But I was just wondering if you've got -- I mean you guys are familiar with the -- with the records and the kinds of records that are in a case file and the site profiles and things like that, if you could maybe provide a little more insight into what -- what can be most helpful to the claimant in this situation.

MS. MUNN: Well the question arises, if it doesn't ensure that the claimant has all the information what could one put in a procedure that would ensure that?

MR. ELLIOTT: What is the information you need?

DR. MAURO: I would argue that, that can't be done, I mean I would -- I think that the intent here is a little different than what's being discussed right now. The claimant has to feel confident that all the essential information that was available was in fact used and used appropriately. They don't need to know all the information that was actually used because some of that information is extremely obscured and impossible to understand.

MR. HINNEFELD: Right.

DR. MAURO: So what -- what I really see here is to make sure that the claimant has a sense that all of the really important relevant information relative to this case and all of these exposure conditions that were reported to this case was in fact properly addressed. And that goes towards personalization and or so what I see this is as really as an extension of personalization. That is they -- they -- somehow it needs to be communicated to them what was the kinds of -- as you started out saying, what were the kinds of information that were used? Now the level of detail you go into I think is on a higher level, a (indiscernible) level, not in the weeds, and

what the issues were, whether there were incidents involved or whether -- I'm not quite sure how far you would go. But at the end of that conversation the claimant should feel that they understood that it was thorough and that all of the important information was looked at and analyzed. I don't think it's fair to expect that all of the real information was really used is communicated to the claimant, it's impossible. It's just too -- you know, some of these cases you know, you know the detail is truly incredible. So I would like to maybe and I don't want and Arjun certainly step in but I think that the intent is not -- the intent is more that the claimant feels that all of the important information was in fact covered and have a sense of what that is and was.

DR. ZIEMER: Does this go to the issue of items that they may have brought up in the CATI?

DR. MAURO: Yes.

DR. ZIEMER: And then they're looking for somehow that that has played a role in the dose reconstruction that they say my husband, my wife was in this blowout --

DR. MAURO: Yes.

DR. ZIEMER: -- And there's no reference one way or the other that that was considered. Is that -- Larry you kind of addressed this earlier I think, the issue of acknowledging items that may have been raised and indicating why or why not they may have not affected the final outcome or something like -- is this the same issue?

MR. ELLIOTT: Well I don't -- I think it's part in parcel, I don't think it's totally the issue. As I hear John talk I think it's personalize the dialogue, the interaction with the claimant in the closeout interview to the point that each claimant can walk away and say okay, I understand what was critical in doing this dose reconstruction, what information that they had to work with and what information that they developed to make a dose estimation on my behalf. That's what I hear John saying and certainly of course what you just brought up that I mentioned earlier if they raise an issue and it needs a dose reconstructor's attention and response to that then that should be something that's also included back to the claimant so they -- they do feel comfortable and understand how they -- they -- the issue has been addressed or reacted to.

DR. MAKHIJANI: Well I think -- I think this could work in some situations where you're actually doing what we call best estimates. But in most cases of denial we're really talking about the cases that are being denied because the cases that are likely compensated I agree with Larry that the language is reasonably clear and people know they're going to be compensated, there are not too many questions about that. But in most cases, at least in my impression we're doing the efficiency --

MR. ELLIOTT: Overestimates.

DR. MAKHIJANI: Overestimates, and that -- and in efficiency overestimates you're very often not using the individual data by -- by definition or you're not using a large -- some portion takes typically an internal dose you might not use any other bioassay data on the idea that TIB2 suffices.

MR. ELLIOTT: But we do go to great --

DR. MAKHIJANI: I'm -- that creates some problem in explaining -- in explaining the thing as to how you know that --

MR. ELLIOTT: Well I don't know that it would create a problem. I think we go to great lengths

in an overestimating dose reconstruction. We took this step to modify how we report those out about two years ago or so where there's language incorporated in the draft report that says here are the following reasons why this is an over-estimate. And those are enumerated and I think a closeout interviewer could pick that piece up and incorporate that into the conversation of what was important about your dose reconstruction. Well these are the things that we didn't have full data on but we've done a reasonable over-estimate in this way to show that your claim you know --

MR. HINNEFELD: I think if this is about personalizing the conversation I think that's something that we should pursue and we can provide -- like I said we can provide a procedure change now that kind of gets into that with the idea that that's almost like a continuing improvement process. You know is -- you know there may be additional things that occur to us as we get into it that would be helpful along with -- so.

MR. ELLIOTT: That's a whole different slant, personalization versus giving up all of the

records that might be ancillary to a dose reconstruction.

MR. HINNEFELD: I think one thing -- one thing that -- one thing that's kind of relevant to at least one of the cases here is there was information provided in a closeout interview that probably was judged not to -- wouldn't affect the dose reconstruction because the way it was done. But there was -- but the dose reconstruction therefore went out without modification from the draft despite the fact that the person had provided specific incident related information to the closeout interview and the -- and the -- the final dose reconstruction said that the person didn't give any specific -- any information about specific incidents because during the CATI they had not given specific incidents, said I was involved in a lot of incidents. And so there was -- there was a phrase in the dose reconstruction the person wasn't involved in you know, they didn't name any specific incidents and that this is an overestimated approach to account for it. But in the closeout interview the person described in detail a specific incident.

DR. MAURO: Right.

MR. HINNEFELD: But there was -- but probably there was -- I don't know if the correct judgment that that incident won't affect the dose reconstruction based on how it was done. But there was no language change in the dose reconstruction to --

DR. MAURO: To capture.

MR. HINNEFELD: To capture that information throughout the closeout interview. So this probably hits to that and it speaks to the personalization. So I think certainly that's one thing you know, we've -- we've had for awhile now and it's been with -- it may be in the last year, a couple years or a little more ago that we have specifically said that any incident raised in a CATI needs to be described in the dose reconstruction even if it doesn't affect the dose, even if it's about chemical exposure you need to say in the dose reconstruction in the -- you know, in their interview they talked about this exposure to beryllium on their job as well but that doesn't add anything to the dose reconstruction, dealing with radiation. So we've made that change in the last maybe -- I forget how long ago, it's probably a couple years ago,

make sure everything is addressed. But in this case it was a closeout interview where the information was raised. So it would -- it would I think fall to us to make sure that we do that same kind of thing, because we have a mechanism for changing -- for doing a change to a draft dose reconstruction before you issue the final even when there's -- you know, because of information we receive in closeout interview. You know, we've got a whole rework loop so to speak that is for that purpose, information received in closeout or -- or attached to the OCAS1 or something like that. So we have a whole rework process associated with that.

DR. MAURO: So you know, if this is a -- maybe I -- the closeout interview, is that held after the person has received the report?

MR. HINNEFELD: Yes.

MR. ELLIOTT: Supposed to be. They're supposed to have had an opportunity to review the report and then an interview is scheduled. In some instances we've --

MR. HINNEFELD: There has been a mistake apparently when some -- at least one person I know of got interviewed when they didn't have it

and I still don't understand how that happened.

MR. ELLIOTT: I don't understand that. It's a rare event.

DR. MAURO: Okay so -- so then again -- so -- so when that unusual circumstance occurs that during the closeout interview the claimant makes reference to some specific incident as to what you have mentioned, I didn't quite follow how do you resolve that is before -- in terms of communicating that to the claimant that since he already has the -- the dose reconstruction completed report with the denial and your person reads it but subsequent to that is this closeout interview which does raise --

DR. ZIEMER: Well it doesn't have a denial attached?

MR. HINNEFELD: The denial goes through DOL.

DR. MAURO: Oh, I'm sorry, I'm sorry, you're right it's not included.

DR. ZIEMER: All he has is the dose reconstruction draft.

MR. HINNEFELD: All he has is the drafted dose reconstruction.

DR. MAURO: The dose reconstruction, you know, I'm so used to looking at the reports that you

all --

MR. HINNEFELD: Yeah. He has -- all he has is the drafted dose reconstruction report and so -- in that event -- in this -- in this instance what I feel like should have happened would have been that well, I don't know how much evaluation was made of the information provided by -- by the person about the incident. Presumably a dose reconstructor would have -- should have been asked what about this incident, they specifically mentioned this incident would this affect how we would have done the dose reconstruction? Dose reconstructor could very well concluded now we have an overestimate. We expected this person to be involved in some incidents; we overestimated based on that. Feel like we've bracketed this kind of incident 'cause it was a one day incident.

DR. MAURO: Okay, so -- so that -- so this information for example in the way in which it could have gone down is when that incident was brought up in the closeout interview, that would have looped back in and the final -- and eventually there was the report that came out later that had here's the dose reconstruction,

here's the result and here's the reason for denial.

MR. HINNEFELD: Well --

MR. ELLIOTT: Even if the final --

MR. HINNEFELD: The final comes from us.

DR. MAURO: We can say no, but there --

MR. HINNEFELD: The final answer comes from us so at that time when additional information is in closeout interview that in this case affects certainly the words in the dose reconstruction.

DR. MAURO: Okay.

MR. HINNEFELD: What should have happened at that point was it should have been reworked and -- and generally then resubmitted as a new draft.

DR. MAURO: Oh, okay.

MR. HINNEFELD: To the -- to the claimant.

DR. MAURO: Put in a date.

MR. HINNEFELD: There have been occasions where the claimant would say I really think my dose reconstructor should say such and -- my dose reconstruction should say this and they have agreed that as long as their final dose reconstruction said that that they had no additional information to hide -- to -- to provide, they weren't -- they didn't need to talk

to us again; we could just go ahead and send them the final dose reconstruction as long as we said that. And we've done some -- there are some cases where we just looped it to the file, change the file and sent a backup. In other instances if they don't say that's okay, if they really -- they may want to talk to us again after they see what we change then they're issued a new draft dose reconstruction and then they get another interview and at that point they either say okay, this is what I want it to say or not, they sign the OCAS1 and then it goes -- and then we print the final and the final goes to DOL and to the claimant.

DR. MAURO: Along these lines in this process earlier you had mentioned the possibility of some language as you were going to look into that communicates to the claimant that I forget the exact words you used that you know, that the outcome of this dose reconstruction that you performed would lead one to -- that may not be compensated. I understand -- I --

MR. HINNEFELD: Yeah.

DR. MAURO: Now, what happens -- what -- able to show causation. Now if those words do find their

way I mean and in a way this is the ultimate link to communication because let's -- let's face it in the end this person wants to know you know, where am I in the process? Does it look like I'm going to be compensated or not? And I -- and I have to say I was presently surprised to hear that there were some words that you possibly could put in here --

MR. HINNEFELD: No, I think, like I said I haven't vetted those with anybody.

MR. ELLIOTT: We don't know for sure.

DR. MAURO: You don't know for sure but let's just -- let's play that out a little bit. So now you're in a very important place in the closeout process because now the person has in front of them the document that has those words and let's say those words say something to the effect that it leads them to understand that they're likely not going to be compensated, if you can do that. But that is -- it's an important place to be because then it puts you in a position to open up a meaningful dialogue with this person on why we believe that we feel this was a good job and why we were claiming favorable or how we did what we did, how we believe we have addressed all of the

issues that you had mentioned and others. Because see, in a funny sort of way without that you don't have context and the person is not -- you know but now -- now really you're talking to them straight. You say listen, it looks like we're not going where you want to be and this is why we believe we're there and why we think we're right. Now, in effect what you're really asking them about is there anything about what I just told you that you think that maybe we got it wrong or there's more -- not more in terms of -- is there more information? Is there some information you gave us before that perhaps we didn't capture, other information that you have for us because right now it looks like this is where we're headed. You know, I know that it -- it almost makes it a lot easier to talk to the person if you could -- if you could sort of be straight with them about where we are, you know what I mean?

MR. ELLIOTT: Yeah, we wanted that from the start, but we weren't allowed to do that. See if we can find some middle ground here that will be palatable to all.

MS. MUNN: So there's no specific action on this

particular item, we can consider this item closed and any activity that's going to occur as a result falls under the general concept of personalizing the information?

DR. MAURO: This is one of the items that sort of loops back that's going to be covered by an earlier one?

MR. HINNEFELD: I think it's probably going to be addressed by a different finding.

DR. MAURO: Right, an earlier one. What do we call those, closed? Kathy what do we call them when they --

MR. HINNEFELD: I think we just say addressed in finding.

DR. MAURO: Oh, addressed in finding, an earlier finding.

MS. BEHLING: That's right.

DR. MAURO: Okay.

MR. HINNEFELD: I think it might fall in with number two.

MS. MUNN: I would say so.

MR. ELLIOTT: Now this is good, you know, understanding you intended this to be for personalization --

DR. MAURO: Yes.

MR. ELLIOTT: This is totally different than the way we read it is, we give up an analysis what we call an analysis record to DOL that has everything that's relevant to a given claim and that usually consumes a whole CD.

DR. MAURO: Oh I know, we've seen them.

MR. ELLIOTT: And so can you imagine trying to make sure the claimant has all of that information and then having to redact perhaps many pages in that.

MS. MUNN: Impossible.

MR. ELLIOTT: And at the start of the program I was an advocate of let's give the person their own analysis record, give them a CD, we're going to burn a CD for DOL, we've got to burn one for DOE, let's give one to the claimant, I want them to have one; no. I was just told we -- it's just not feasible, not practical and not pragmatic, so.

MS. MUNN: Finding number five, I do believe that we have covered that one pretty thoroughly. We've already talked about the fact that we're going to call health physics reviewers something else.

DR. MAURO: Lesson number one.

MR. HINNEFELD: Yeah.
MS. MUNN: It goes with number one.
MR. HINNEFELD: Yeah.
MS. MUNN: Finding number six. No requirement to connect the closeout interview with the CATI.
MR. HINNEFELD: Is this in terms of making sure that during the closeout interview they describe that this is what you told us in the CATI?
DR. MAURO: This goes to exactly the example that Paul used before.
MR. HINNEFELD: And this is how we addressed it.
DR. MAURO: Right.
MR. HINNEFELD: Okay, and that could be instructions to be provided in the procedure to the interviewer; we could do that at that point. Okay.
MS. MUNN: And since we've already talked about -- is this also --
DR. MAURO: Which one was that?
MS. MUNN: -- included in the --
MR. HINNEFELD: That's ninety-two dash six on the matrix.
MS. MUNN: Ninety-two dash six and then ninety-two dash three we had said we're going to suggest changes in the procedure.

DR. MAURO: It's probably a good idea when -- when -- when three is being looked at that you know, this is almost like a refinement --

MR. HINNEFELD: Yeah.

DR. MAURO: -- on three, and it's probably a good idea to make sure that when the person is working off number three, that they take into consideration six.

MR. HINNEFELD: Okay.

DR. MAURO: You know otherwise you could see a person doing three but not really addressing six. But this -- you understand.

MR. HINNEFELD: Yeah.

MR. MARSCHKE: So what's six?

MS. MUNN: We --

DR. MAURO: It goes back to three -- it goes back to --

MR. MARSCHKE: Is it addressed in finding three or is it closed or is it --

MS. MUNN: No, it's going to be the same action as number three.

DR. MAURO: Yeah, it's being addressed -- I don't know if we use the word trans -– Kathy, when do we use when you transfer -- not transfer but when we --

MS. BEHLING: Addressing finding 9203. Not transfer, transfer is going out of the task three system.

DR. MAURO: That -- that leaves -- that leaves this; okay.

MS. BEHLING: Yes. So this is just going to say address in finding 0092-03.

DR. MAURO: Kathy if we address an issue in a different procedure still within the task three realm but in a different procedure is that a transfer or is that an addressed?

MS. BEHLING: I would still consider that an address.

DR. MAURO: Okay.

MS. MUNN: Procedure six, oh, we have two procedure 92-6.

MR. HINNEFELD: Oh yeah.

MS. MUNN: We have a numbering issue, Kathy. That should be seven.

MS. BEHLING: Okay, we'll make that change.

MR. MARSCHKE: Wait a minute; we've got a seven on the next one is a seven.

MS. MUNN: And that should be eight.

MR. MARSCHKE: The next one will be eight.

DR. MAURO: We've got a ripple effect.

MS. MUNN: We have a total of eight. Just a numerical -- All right, technical questions are not answered in real time. Is this not also the same discussion that we had relative to the availability of personnel we discussed in item two? Finding two or finding three?

MR. MARSCHKE: I think it was finding two. If that -- we talked about getting back to the claimant with answers to the questions.

MS. MUNN: Uh-huh.

DR. MAURO: Okay, addressed in item two.

MR. MARSCHKE: Well it's not really addressed.

DR. MAURO: No, not addressed, to be addressed.

MR. MARSCHKE: Would it be the technical answer -- questions not answered in real time, we're not going to answer the questions in real time, we're going to basically get back to them. Basically if -- if -- if we've decided that we're not going to have an HP present in the closeout interview to answer questions in real time, we're going to get back to them, we're going to take the questions and get back to them later. So, it's not really addressed, it's --

MS. MUNN: The same issues in a dif -- presented in a different way.

DR. MAURO: Right, right.
MS. MUNN: So, but the resolution is the same.
MR. MARSCHKE: Okay.
MS. MUNN: Right?
MS. BEHLING: Is that finding 02 or 03? Because 03 we discussed about stopping the clock on signing the OCAS1 forms until their questions can be answered, or am I confusing that with --
MS. MUNN: No, that's what we said.
MR. MARSCHKE: I have that under -- you know, I have that under 03. Under 02 I had get back to the claimant with answers to questions and under 03 I had you know, when a claimant asks a question remove the signing of the OCAS1 form from the discussion and get back to the claimant and stop the sixty day clock. So, it's kind of under --
DR. MAURO: It's more two than three I would say.
MS. MUNN: Can we say we're covering a broader set of issues in number two I think than in three.
MS. BEHLING: Okay.
MS. MUNN: And it will be addressed in any case. And the --
MR. HINNEFELD: Last one.

MS. MUNN: That was number seven, the final issue is number eight. No specific provision for responding to complaints about difficulty in understanding the dose reconstruction. Stu?

MR. HINNEFELD: Well, there's -- there's that -- a difficulty in understanding which is what we talked about having a health physicist get back to the person if need be to you know, answer questions or you know, make sure we answer questions and then it leaves room for undue and substantial subjectivity in addressing technical information.

DR. MAURO: I think it's a two.

MR. HINNEFELD: Does this relate back to things we've already said we're going to look -- we're going to specify and what are -- what conditions does this have to be referred to a dose reconstructor for response and -- and then it would fit in with what we've already kind of committed to which was to provide more specificity in the procedure?

MS. MUNN: Well the overall personalization we were going to do in item two.

DR. MAURO: Yeah, see, two covers just about all the things we're talking about.

MR. HINNEFELD: Yeah.

MS. MUNN: Yeah.

MR. HINNEFELD: Okay.

MS. MUNN: Does anyone have any other burning issue they feel needs to be covered under PROC92? I'm not certain exactly how many action items we have here but I think about four, most of them having been identified up front. I'll try to put them together afterward so that we know what we're doing with them.

DR. MAURO: By the way this is a very important part of our new process and I know we've been doing it but these action items are actually going to go into the new form on direction given there's an actual box now and a form that says direction given by the working group and actually these action items have to be -- are going to be our scorecard so to speak.

NIOSH – INCORPORATION OF PROC-0090 INTO MATRIX

MS. MUNN: Yeah. Okay. That brings us to the incorporation of PROC0090 in new form into the matrix. I will have to admit that when I put my materials together last night the PROC90 issues were not among the pieces of paper that I picked up. So I am not able to direct the discussion as

to where we were with ninety and why we were concerned with a new form into the matrix.

DR. MAURO: I have to ask, is PROC90 one of the QA procedures?

MR. HINNEFELD: No, that's the CATI interview process.

MS. MUNN: That's CATI.

DR. MAURO: Oh, this is the CATI.

MS. MUNN: CATI.

MR. HINNEFELD: This goes back to step one -- step one of the interview -- of the procedure review. There were actually three different procedures that described the CATI process that had since been consolidated into PROC90.

DR. MAURO: Okay.

MR. HINNEFELD: Based upon my read of PROC90, the consolidation is the issues remain. You know, the revision did not address the findings from earlier procedures. So, there has been limited discussion of the findings from those two and then the issue is presented here as putting it in the new format which is going to be largely an administrative task once you get the database you put it in there. I did send and Wanda I don't think I even put those on my disk, they must

still be on my hard computer.

MS. MUNN: Nope, they were not on the --

MR. HINNEFELD: I sent two -- no, it was separate, I sent a separate message and there were two files on there that were essentially Word files but in the new format, the details format from the database and just showing a demonstration and there are some -- there are twenty-nine findings that's now related to PROC90 from the -- from the first set review.

MR. PRESLEY: Is that the one you sent out December 7th?

MR. HINNEFELD: That was Friday, probably sent it Friday, right. And there are -- and so I've only -- I sent a message with essentially two files attached which are Word files which are just the details page and how it would be converted of what I proposed and I don't know if this will fit so I hope I copied Kathy on it. I don't know what I proposed would fit in the database or not -- the database field or not because I proposed in the -- in the -- in the finding name not only listing PROC90 but listing the finding as it was originally numbered in that first product because it was like PROC4-1, which would be the first

finding and then that would convert to 90-1 and then when she gets through with PROC4-1's, maybe four findings on PROC4 then you go to PROC5 findings and so the numbering will (unintelligible) you're ready for PROC number 5 when you get to that finding then that one we'd convert to PROC5 and so there'd be some way to retain the origin of those findings. It may not fit with the database's design, so I don't know. It may be -- I don't -- if it'd be possible to track them from their exist -- their -- you know, original number, like we could PROC them, you know track them as PROC4, PROC5 and PROC17 findings, track them in that manner database we could -- and I don't know, you know, I hate to add fields to that database, it seems to be pretty well defined. But I mean like have a predecessor finding; I know Kathy wants me to shut up.

MS. BEHLING: No. No, no, no, you're doing fine. Stu, you did send me that email and I think that what you -- I like what you've done and I think that that will fit into our -- the matrix as it currently exists and the way I was thinking we could do this is to go back to we still have

captured on the database under the first set, the PROC4, PROC -- I guess there were three as you said, there were PROC4, PROC5 and PROC17. And so I can go back into the details discussion on those initial findings and indicate that these will be now addressed under the PROC90 and I think what you've done under the procedure number and the finding number will work just fine, that you put in parentheses that these were originally under PROC04 and 5 and 17. So, I think this should work.

DR. MAURO: So, would that be an addressed in for the others, the PROC -- the PROC4 and 5 that where these issues were originally raised now are we saying that those issues are being addressed under PROC90 and therefore are transferred -- not transferred, are addressed in? In other words I'm thinking about the form of -- is that how we're going to get this --

MS. BEHLING: Yes.

DR. MAURO: -- closure. So it will be addressed in and then when you find -- when you do get the PROC90 it will all be there and perhaps with a reference to a white paper?

MS. BEHLING: Yes.

DR. MAURO: And the -- in -- in -- in the write-up since you can't fit it. You know, maybe some brief description -- conversation we're having right now --

MR. HINNEFELD: Yeah.

DR. MAURO: -- with the end that -- under the section workgroup meeting –

MR. HINNEFELD: Right.

DR. MAURO: -- this discussion will somehow be captured.

MR. HINNEFELD: Yeah.

DR. MAURO: And -- and it will be making -- and also there would be a reference to a white paper that you submitted on -- is that --

MR. HINNEFELD: No, I didn't submit a white paper. All I submitted was examples in how it would look.

DR. MAURO: Oh, okay. Okay.

MR. HINNEFELD: I did not submit a white paper on this. What -- What needs to happen on these is well A we all have to refresh our memories and then have a discussion about -- because the finding was made and we made some initial responses and some of those initial responses pointed out that well we have this new

acknowledgment packet or that -- we -- at the time that we were developing which is -- but is now filed now and so some of those findings we think were addressed sufficiently or we hope to address sufficiently by the standing acknowledgment packet. And there have been a few other things that have been modified that are captured in those responses. So we kind of have to get a feeling for how far have these responses gone, you know, have we -- have we actually solved any of them and for those that are not solved then we need to talk about additional approaches, you know, other things that might have to happen because I don't know that I would say that everything had a nice clean resolution likely; I don't think they all did. So, that's what would have to happen is we'd have to pull those back out, refresh our memories and -- and determine -- and -- and our part as well on our side, what can be done for instance, you know the people who actually do the work normally know best the feasibility of a particular change or that particular change or if maybe there's an alternative that can satisfy the intent. And so get the people who do the work engaged in what is

it that can be done for these. So that has to happen and then -- then we can discuss I think the future work.

DR. MAURO: So -- so the way this would work then is in our matrix, what you just discussed would be in the discussion and I guess there's an action item that is you and Kathy are going to work on I guess you're going to work on some kind of -- I assume some kind of documentation that tells the story oh, you're going to (inaudible) the open items and these others and how -- how PROC90 is or is not -- I mean -- let's try to go ahead and get a hook so that we don't lose track of these items.

MR. HINNEFELD: Probably what -- what we could do is we could have a NIOSH you know, action, you know, we had -- we'll have -- we come -- we can -- someone, I don't know who someone is, will capture this conversation at this meeting in the Board block and then after that there's a NIOSH follow-up block or something like that. So we can go back and we can provide the follow-up information and put something in each of those blocks, even if it's to say that we think our original response took care of this. We could

provide that and then that kind of kicks us on down moving that along. I guess we could do that.

DR. MAURO: Okay.

MS. MUNN: You just said the magic words, don't know who does that. Can we agree on who does that?

MR. HINNEFELD: Well I can -- I can write that summary that what I think needs to happen on those findings from now on and -- and then put that in each -- each box -- a box for each of those findings and then I could, at some point, I won't -- this may not -- this probably won't be ready for January. But at some point we could provide an updated NIOSH response even if it's to say that we think our initial response (unintelligible) so and then we'd be prepared to go from there and gives you then the opportunity to see what our position is now and look at -- and the initial response would be on there you know, we'll cut and paste that on there so it'll be up above.

DR. MAURO: Given the complexity of this and the fact that in order to address each of the subparts of these things we're talking about and

the process that will take place between you and -- well, between NIOSH and SC&A in terms of the next meeting, apparently there will be some document prepared of some form. It sounds to me it's not something that we can easily put into this form.

MR. HINNEFELD: Well right now I think that -- I don't know of anything that won't, these are findings.

DR. MAURO: Okay, well if it can, great.

MR. HINNEFELD: These are findings.

DR. MAURO: If it can, great.

MR. HINNEFELD: These are findings about is at the time three procedures and so unless I run into something and unless -- well, I don't remember very well, but my recollection is that they -- they are not so special as to require their own white papers. I think we could -- if we could address them as much as we've addressed other procedures and with, you know, initial response and then subsequent discussion.

DR. MAURO: So, from a format point of view there would be a PROC009 and it would have a 01 through 0 --

MR. HINNEFELD: 29.

DR. MAURO: 29. Each one will have its own page and each one would be separately tracked.

MR. HINNEFELD: Uh-huh.

DR. MAURO: Okay.

MR. HINNEFELD: I mean -- don't you think?

DR. MAURO: Unless you feel that some of the 29 collapse into something else.

MR. HINNEFELD: Well you know for cleanliness of tracking let's put them all on there.

DR. MAURO: Okay.

MR. HINNEFELD: You know --

MR. MARSCHKE: Don't do that yet.

DR. MAURO: Don't do that yet? Okay. Play it out.

MR. HINNEFELD: Yeah, let's just play it out, get it in there and then it'll be something for us to discuss as a you know, we've got to finish up the first set, I mean there were a series of actions that we need to do from the first set that I'm not sure are all done yet, a number have been done. But then these -- these actual findings, these are down toward the end of the table, some that I think they were the last few procedures on the matrix. We need to go ahead and work ultimately through resolution on those so --

DR. MAURO: So -- so we've got to build this very similar to what we build let's say PROC92.

MR. HINNEFELD: Yeah.

DR. MAURO: It has its own stand alone series of in this case, converts into a 29 findings.

MR. HINNEFELD: Yeah, now presumably I don't know -- yeah, I don't know if Kathy's built -- I would assume that's in there if she's -- she's populated all the data tables that those findings would be in there. Kathy, is that right? The PROC4, 5 and 17 findings, are they in there?

MS. BEHLING: Yes, they are.

MR. HINNEFELD: Okay.

MS. BEHLING: The findings from the first set of -- the first set of procedures that were reviewed are already in there, yeah.

DR. MAURO: Okay. I printed something out that wasn't.

MR. HINNFELD: So then that -- that page in the Access version of that page then will open up, where we have a folder in it and we just fill out what we can fill out.

DR. MAURO: Okay. Great.

MS. BEHLING: And Wanda I might just add that I had been under the impression that during this

meeting both Steve and I, I think have been taking notes and we will take on the responsibility of filling in the next blue section of our details section where we say this is what transpired during the 12/11/07 meeting and we will fill in the discussion issues and the workgroup directives because we -- like I said, have been trying to take very detailed notes and as this meeting has been progressing and then we'll send that off to NIOSH and then they can also fill in you know, any follow-up actions and we'll have our follow-up actions to fill in. But I was under the impression that SC&A would continue to update and complete this matrix.

MS. MUNN: Yes, I was under that same assumption so I have not been taking notes in that regard. I'll be glad to work with you Kathy, just give me -- you send to me the information that you have recorded for the blue box and each of the cases that we've covered here. I'll certainly make any comments that seem appropriate here and pass them back to you for incorporation in the next copy of what the working group sees.

MS. BEHLING: Very good, that -- that will work.

MS. MUNN: Great. Thank you very much.

MS. BEHLING: So I think we're set for PROC90 then. That looks great actually now that I finally see it.

SC&A AND NIOSH – OTIB-0023 TRACKING IN MATRIX

Next item, resolution of how to incorporate tracking of crucial OTIB0023 aspects in the matrix. This is a similar kind of problem as I recur -- as I -- as I recall. I believe we were expecting the agency and our contractor to talk about this offline and have some proposal for us today.

MR. HINNEFELD: I'm not sure we did that.

MS. BEHLING: Well, actually this was an issue that Stu, you and Hans and I discussed before the previous meeting.

MR. HINNEFELD: Right, right, we did that.

MS. BEHLING: Right, we -- we talked about this back in November before I believe the November 7th meeting and I thought we had come to agreement and resolution on all of the findings and most of those resolutions was -- were that you were going to incorporate some changes into a revision of this procedure and I believe our discussion during the last meeting was the fact that maybe you were going to provide to the

workgroup some wording associated with what kind of changes you were thinking about incorporating into the revisions.

MR. HINNEFELD: Okay, I can do that. We've already -- you know, there is a modification to IG1 associated with this too. That modification has been made already. I don't think OTIB23 has been revised though.

MS. BEHLING: I'm sure it hasn't. Like I said we discussed this a month ago. But this gets captured into with the matrix just like all of the other items here. This is not a matrix -- anything difficult with the matrix. I -- I believe if I'm recalling correctly that this was just going to be an issue that NIOSH was going to come back with some wording as to how they were going to revise the OTIB23 procedure.

MS. MUNN: And you have -- Kathy and her team has incorporated a great deal of information on that OTIB already. Just we don't want to get bogged down and leave it.

MS. BEHLING: Right.

MS. MUNN: So the action is for NIOSH to provide wording.

MR. HINNEFELD: Yeah.

MS. MUNN: For OG what?
MR. HINNEFELD: OTIB -- OTIB23.
MS. MUNN: Well yeah, OTIB23 but you were going to incorporate you said an IG procedure.
MR. HINNEFELD: Oh, and IG1.
MS. MUNN: IG1 goes into it?
MR. HINNEFELD: There was like a one page -- page change to IG1.
MR. ELLIOTT: This has already been done.
MR. HINNEFELD: That's been done.
MS. MUNN: So it's just getting it into the matrix?
MR. HINNEFELD: Yeah.
DR. MAURO: Stu, I'm looking right now at the material you sent --
MR. HINNEFELD: Okay.
DR. MAURO: OTIB23 items 1 through 8 of these.
MR. HINNEFELD: Right.
DR. MAURO: On your package, the old format and matrix.
MR. HINNEFELD: Right.
DR. MAURO: It starts on page ten for anyone who has that. Now I see that in that all of the issues are laid out the way we used to do it and -- and I see there's a red -- there are some red

material.

MR. HINNEFELD: Yeah, yeah.

DR. MAURO: So, now that red material that's in here I'm not quite sure what -- whether the November 7th red material that's in your matrix made it into the new format or not. Steve --

MS. BEHLING: No -- no it didn't.

DR. MAURO: Oh, okay.

MS. BEHLING: I can -- I can incorporate that.

DR. MAURO: Okay. Now but then over and above that the next step in the process, I just want to make sure I got it right. So in effect we'll load up the matrix new format with your new material that's in your old matrix from November 7th and I didn't follow from there what were the next steps in terms of further loading up the matrix? For each one of --

MR. HINNEFELD: Well, we've talked about possible wording changes but I -- some of them are in that, these November 7th notes.

DR. MAURO: Okay. So I mean that's where I'm going. Maybe you've captured a lot of it already.

MS. MUNN: Would the action be for the two of you to take a look at what we have and ascertain

whether additional words need to go into the matrix or whether you already have them?

MR. HINNEFELD: Yeah, I guess actually there is sort of a promise as you know, -- some of them are pretty -- fairly specific in terms of what we're going to do. Others are sort of a -- an ill defined promise that we're going to do something so it looks like we could -- we just need to do a markup as we're going to change it, yeah.

DR. MAURO: The goal I think in the end is to assign to each of those eight findings open, closed, in abeyance --

MR. HINNEFELD: Yeah.

DR. MAURO: And words that go with that.

MR. HINNEFELD: Yeah.

DR. MAURO: Right now we don't have that.

MR. HINNEFELD: Right.

DR. MAURO: We do?

MR. HINNEFELD: They're all in abeyance.

DR. MAURO: They're all in abeyance, okay.

MS. MUNN: All right.

MR. HINNEFELD: Yeah.

MR. ELLIOTT: Work to be done.

MS. MUNN: Yeah, work to be done. All right.

HOUSEKEEPING AND ACTION ITEMS

Does anyone have anything else other than our -- our housekeeping issues with when, where and how we meet next? Any other specific matrix items we need to address? Any other procedure issues? If not, it's calendar time.

MS. BEHLING: Okay, Wanda?

MS. MUNN: Yes?

MS. BEHLING: Maybe if you would allow me to just ensure that I have all of the action items that we talked about with regard to changes that we're going to introduce into the matrix. If I could go through those I would appreciate it and then you can tell me if I've missed anything.

MS. MUNN: We will certainly do that if you would like to do it that direction or it was my intent to read through the action items that I have.

MS. BEHLING: Okay, that's fine. I also wanted to inform you that I did contact our Access person during one of the breaks and I have some answers with regard to whether we can or cannot do some of the things that -- in fact we can do everything that I have written down here, he's going to be able to make those changes.

MS. MUNN: Good. All right. Do you want to go

through that before we do the calendar issues?

MS. BEHLING: No, no, go ahead; I didn't know you were going to go back to the action items. Go ahead.

MS. MUNN: Yeah, I try to read my notes, sometimes that's impossible but we'll see where we go with it. We're currently scheduled to meet prior to the full Board meeting in --

DR. BRANCHE: The last I heard Wanda was that you and Robert had to work out between you how you all were going to organize your meetings on the seventh.

MS. MUNN: I believe as far as we know right now there may not be a problem with -- with that.

MR. PRESLEY: Are you planning on having yours start in the morning or at twelve?

MS. MUNN: I had intended to have mine start in the morning but if you're not going to -- you know, if it turns out we don't have to have an NTS meeting or can we reverse it now and say we will have -- start our meeting in the afternoon so that, that would leave the morning free if it turns out we do have to have an NTS then we could do it in the morning.

MR. PRESLEY: That's fine with me.

MR. ELLIOTT: The earliest that NIOSH staff from OCAS could get there on the Monday is I think around noon, right Stu?

MR. HINNEFELD: That'd be my guess, get there at noon, maybe noon.

MR. ELLIOTT: Since we could take effect of the cheaper air fare rate but noon is the earliest I think we can -- we can make our presence.

DR. BRANCHE: For either meeting.

MR. ELLIOTT: For either meeting, any meeting you pick.

DR. BRANCHE: So it would mean that if there's a need for a Nevada Test Site meeting it might have to follow this one.

MR. ELLIOTT: That's noon -- that's noon out there.

MS. MUNN: With noon Monday where we are.

DR. MAURO: I think our folks have made their plans to arrive sometime Monday morning, like ten o'clock, so --

DR. BRANCHE: Okay so I'm just saying that Wanda's making her plans and just the idea of a Nevada Test Site meeting on the morning of the seventh is impractical.

MR. HINNEFELD: Right.

DR. BRANCHE: So if there's going to be a Nevada Test Site meeting it's going to have to follow this one.

MR. PRESLEY: Yeah.

DR. BRANCHE: Just bear that in mind. Ms. Munn, back to you.

MS. MUNN: I'm thinking and that's a rare occasion so bear with me.

DR. ZIEMER: So we have subcommittee Tuesday --

MS. MUNN: Tuesday morning.

DR. ZIEMER: -- morning at ten?

MS. MUNN: I believe.

DR. BRANCHE: No, no, Linde is at eight.

DR. ZIEMER: Linde's at eight.

DR. BRANCHE: Linde's at --

DR. ZIEMER: No, that's the workgroup, the subcommittee would be Mark.

DR. BRANCHE: I think we tried to use ten or ten thirty; I can't recall. Zaida, are you on the line?

DR. ZIEMER: So Lind -- Linde and dose reconstruction are Tuesday morning, the full Board starts at noon.

MS. MUNN: At noon.

DR. BRANCHE: No, the full Board starts at one.

MS. MUNN: One, after lunch.
DR. BRANCHE: I think -- I think what we have is that whatever happens with the subcommittee I think depending upon how briskly they move I think we've scheduled to end at twelve thirty; I think it goes from ten to twelve thirty or ten thirty -- ten fifteen to twelve thirty or something like that. It's a tight little frame.
MS. MUNN: Uh-huh, yeah. I think Mark doesn't expect to cover a lot of material.
MR. PRESLEY: Arjun?
DR. MAKHIJANI: Yes.
MR. PRESLEY: How much have we got to discuss on NTS on the nineteenth?
DR. MAKHIJANI: Oh Mr. Presley, we've given you the extent of beta dose review, so I believe and we've discussed it some I believe that that was for re-suspension?
DR. MAURO: Yeah, well I guess I have a more of a question. To what degree have we married the site profile reviews and the SEC petition because we have been activated to start work on NTS SEC petition, those are -- we're still keeping those separate, so the --
MR. PRESLEY: Nobody has -- nobody has married

the two together whatsoever.

DR. MAURO: Okay, so --

MR. PRESLEY: In fact there's not a working group on the -- on the SEC that I know of.

DR. MAKHIJANI: Okay, fine.

DR. MAURO: So this will be solely a site profile --

MR. PRESLEY: Solely a site profile -- I'd love to wind it up.

DR. MAKHIJANI: I think -- I think the overall is wrapped up Mr. Presley in a sense that I think NIOSH and us have agreed on which items they're going to modify and which items they're not; so we're in that second round phase as you know and we looked at the pieces that NIOSH has put on the table. I don't think that there's a one piece I think that you're working on -- there's one piece we still owe you which was on item eleven. I remember the number of the item but I don't remember the content because I'm not writing up the piece, I'm just coordinating the response to it. I have that should be here in the next few days and I should send it to you either before the first of the year or immediately after the first of the year. That's the only piece that we

owe you I think from our side that I remember.

MR. PRESLEY: We've got that meeting on the nineteenth to try to wrap up as much as we can on that all right. It's taking Wanda's time I know, but --

MS. MUNN: No, it's okay.

MR. ELLIOTT: Well, there's one other new thing that I want to offer to you --

MR. PRESLEY: And I want to --

MR. ELLIOTT: -- that you might want to take up either on the nineteenth or before the Board meeting in Vegas. We had a number of comments provided to us about the site profile by a claimant from the site. I know the Board and Mr. Presley's working group, SC&A have been copied on those comments from this -- this person. We have prepared in matrices to show how we are reacting in our site revision to -- to his comments. I think it would be good if the working group were you know, involved in this and understood where we were going 'cause it -- there's been a lot of press about some of this person's comments and so it would also offer the opportunity for that individual in a public setting to hear how his comments are being addressed.

DR. MAKHIJANI: Was I copied on this? I'm not sure --

MR. ELLIOTT: I'll have to check, it may not have been directed to you -- it may -- well you haven't seen it yet, you haven't seen our matrices. I hope you've seen some of the input that this person's been sending.

MR. PRESLEY: Some of it, yes.

DR. MAURO: I've seen some material but I have to say I wasn't sure where -- what it applied to. I need a little help here, could you help us out?

MR. ELLIOTT: Well this goes to a variety of concerns that this individual is raising, the Brand and the Henry activity not characterized accurately --

DR. MAURO: Okay.

MR. ELLIOTT: -- in the site profile. That's one extreme of the spectrum of comments, the other extreme is well there's no -- there's no scale given to certain diagrams and layouts that are presented as exhibits in our site profiles so how could the dose reconstructor use them to estimate distance from where a person stood to the shot kind of a thing. So, we have a matrices now that we've pulled together, we're trying to wrap up a

response to a couple final comments that he's given us. I think it would be great if we submitted that to you all so that you could see that. We've -- we've collated all his comments in a long list and tried to identify those that are relevant to the issues in the matrix. So, you know, I just offer that. I think it's going to take a little bit of time to go through that, to wade through that.

MR. PRESLEY: I don't think -- I don't -- I don't think we're going to be ready to do that by the nineteenth.

MR. ELLIOTT: The nineteenth is next --

DR. BRANCHE: Wednesday.

MR. ELLIOTT: Wednesday.

DR. BRANCHE: We have an 11:00a.m. call.

MR. ELLIOTT: I don't know, I can't tell you today how soon we're going to put this matrix out, it was close yesterday except for one or two of these things I've asked for.

MR. PRESLEY: Yeah, Mark and I talked about this yesterday and that's --

MR. ELLIOTT: So he did talk to you?

MR. PRESLEY: Yeah, oh yeah, we've -- we've discussed it, we don't know whether we're going

to be able to --

MR. ELLIOTT: I just think -- I encourage the working group if you would to consider this individual's opportunity to get before you.

MR. PRESLEY: In other words you would suggest that we meet with this person?

MR. ELLIOTT: I think if we can get it to you before the nineteenth, now whether you want to take it up in a teleconference call on the nineteenth or not is your business but I think you know, if the Board, at the Vegas meeting site, you have an opportunity to really show this individual what we're doing.

DR. MAKHIJANI: Mr. Presley, it might be that if NIOSH is finished with their response then Mark Rolfes could present it on the nineteenth.

MR. PRESLEY: Yeah.

DR. MAKHIJANI: And then you can decide whether you want us to look at it and comment on it for the Board meeting. I mean, depending on how complex it is I think we might be able to --

MR. ELLIOTT: I don't think it's that complex actually.

MR. PRESLEY: No, I don't think it is.

DR. MAKHIJANI: If it isn't then we might be able

to give a response.

MR. PRESLEY: The other thing is get the NTS group in a meeting after Wanda's meeting, that's the only thing I know to do.

MS. MUNN: Either that or before it.

MR. ELLIOTT: Early the next morning.

MS. HOWELL: There is no -- I mean --

MR. ELLIOTT: Compromised by the other meetings.

MR. PRESLEY: Yeah, you've got the other meetings there.

MS. MUNN: Yeah. We can -- if we don't anticipate the NTS meeting to be very long then I anticipate our meeting will be four hours, possibly five or six; start at one and run to five.

DR. BRANCHE: Or five thirty.

MS. MUNN: Or five thirty.

MS. HOWELL: You can't move the Board meeting or this subcommittee meeting because of the Federal Registry. The other thing is that if people haven't booked their flights out Thursday after the meeting's over -- I know.

MR. ELLIOTT: Everybody is so exhausted at that point.

MR. PRESLEY: Yeah.

MS. MUNN: Yeah.
MR. ELLIOTT: Totally exhausted.
MS. MUNN: Yeah, I don't mind doing that because I just have a short flight home.
DR. BRANCHE: For a change.
MS. MUNN: But it is a bad time to have a meeting.
MR. HINNEFELD: Yeah, it can, it's hard to get back.
MR. PRESLEY: I'm leaving Friday morning, that's the only time I can get out.
MR. HINNEFELD: But we'll still be worn out.
DR. MAURO: I know.
MS. MUNN: Then shall we --
MR. ELLIOTT: We're either going to do that or face this individual in the full Board meeting during public comment and --
DR. BRANCHE: And not going to be able to respond.
MR. ELLIOTT: And not -- you know, not be able to -- so I -- I hate to make life miserable for you folks, but --
MS. MUNN: Can we just set up a 7:00 p.m. meeting Monday evening?
DR. BRANCHE: For Nevada -- you mean for Nevada?

MS. HOWELL: How many OCAS people do you need?
MR. PRESLEY: They pay us overtime?
MR. HINNEFELD: Same amount I get paid.
MS. MUNN: Sure.
MR. ELLIOTT: Two, three, Rolfes is one, I don't know who, either somebody with Rolfes, either you know, it has to be Stu or me or somebody. You'd have two of us that are --
MR. PRESLEY: Yeah.
MR. ELLIOTT: But it also -- there may be some ORAU team members that Mark wants to bring in that could be brought in by phone too. I just don't want us to miss an opportunity here to try to do the right thing by this guy.
DR. MAURO: I think we have a great opportunity on the seventeenth to get -- right now I know I'm disoriented.
MR. PRESLEY: Nineteenth.
DR. MAURO: No, no, I'm sorry, the nineteenth of this month we were going to have a conference call.
MS. MUNN: Yes.
DR. MAURO: And between now and then there's no doubt that at least SC&A can sort of get our arms around what the heck is going on, what the issues

are, what -- you know, and so at least we can have a productive conversation on what we can accomplish on the -- on the nineteenth and maybe deal with and what really we've got to do when we get to --

MR. ELLIOTT: We'll make sure the individual knows that the working group is going to meet that day and there'd be a presentation from Mark about this and he could, you know, maybe that -- maybe that will be enough, I don't know.

MR. PRESLEY: And it may be.

MS. MUNN: But the phone call -- you think the phone call on the nineteenth?

DR. MAKHIJANI: On the nineteenth we'll just be listening to Mark.

(multiple speakers)

DR. MAURO: Well I know but -- and of course take a look at where we are on the other issues.

DR. BRANCHE: We have an hour scheduled for Nevada Test Site on Wednesday January 9th, that morning.

MR. ELLIOTT: That's part of the Board agenda?

DR. BRANCHE: It's part of the Board agenda.

MR. PRESLEY: Yeah, because I asked Lew in case that we're able to make our recommendation.

DR. BRANCHE: What about Wanda's suggestion that we think about having the Nevada Test Site meeting on the evening of the seventh at seven – 7 p.m.?

MS. MUNN: No, that would be a workgroup meeting, not a --

DR. BRANCHE: Yeah, a workgroup meeting.

MR. PRESLEY: Workgroup meeting.

MS. MUNN: That work?

MR. PRESLEY: If we can get everybody there, yeah.

MR. ELLIOTT: That just for an hour.

DR. BRANCHE: So, that's what you're going to do?

MR. PRESLEY: Go ahead and do it.

DR. BRANCHE: Okay, 7 p.m. -- So Wanda, the procedures meeting is 1:00 p.m. on Monday the 7th?

MS. MUNN: Yeah, one o'clock will be fine.

DR. BRANCHE: And Nevada Test Site -- now you definitely want one or you want to hold it now and make it -- make a firm decision on the nineteenth?

MR. PRESLEY: We'll make a decision on the nineteenth.

DR. BRANCHE: All right but I still need to have

Zaida --

DR. ZIEMER: Hold it.

DR. BRANCHE: Hold the time.

MR. PRESLEY: Hold the time, yeah.

DR. BRANCHE: 7:00 p.m. Who's baking the cookies?

MS. MUNN: Seven to nine.

DR. MAKHIJANI: And there's nothing for one, right?

DR. BRANCHE: Yeah, on the 7th, this procedures is meeting on the seventh.

DR. MAKHIJANI: At one?

DR. BRANCHE: At 1 p.m.

DR. MAKHIJANI: But there's nothing before one o'clock, right?

DR. BRANCHE: No, because people are flying in.

MS. MUNN: All right, following that, there's no question in my mind that we need to have -- we will need to have another meeting of this group before we go to Amarillo in April and --

DR. BRANCHE: But should be one -- Ms. Munn, just to -- so that you know, I don't know if you want any of the -- anything resolved before the Board has its conference call on February 20th.

MS. MUNN: No, we won't.

DR. BRANCHE: Amarillo, okay.
MS. MUNN: Yes, uh–huh.
DR. BRANCHE: Amarillo is --
MS. MUNN: Is the first week in April.
DR. BRANCHE: The second --
MS. MUNN: No, actually, first full week.
DR. BRANCHE: First full week, it's April 9th through the 11th.
MS. MUNN: And I'm looking at sometime in mid March for --
DR. ZIEMER: Didn't that get changed the seventh to ninth; is that one that got moved?
MS. MUNN: That's seven through nine.
MR. PRESLEY: Yeah, that's what I've got.
DR. ZIEMER: Nine to eleven and then it got changed.
MR. PRESLEY: Yeah, seventh through ninth is what I've got on here.
DR. BRANCHE: What did I say?
DR. ZIEMER: You said nine through eleven.
DR. BRANCHE: I'm wrong, you're right, forgive me. It's April 7th through 9th. Forgive me. Didn't mean -- I just was making sure you were --
DR. ZIEMER: It got changed.
DR. BRANCHE: I wanted to make sure you were

listening.

MS. MUNN: Mid March in enough time for us to get done whatever we'll need to have done for Amarillo. My guesstimate would be something like Thursday the 13th?

MR. ELLIOTT: Face to face or teleconference?

MS. MUNN: Let's plan on face to face, if we can fall back to telecon, then that'll be fine.

MR. PRESLEY: I'll be there by teleconference.

MS. MUNN: Okay.

DR. BRANCHE: Did you say March 13th?

MS. MUNN: March 13th, procedures.

DR. BRANCHE: At nine thirty, something like that?

MS. MUNN: Yeah. All right now then, the hard part. I'm going to try to read through my action items. Are you still awake, Kathy?

MR. PRESLEY: Can I ask one question?

MS. MUNN: Yes, sure.

MR. PRESLEY: The teleconference for the total Board, now is that on the 20th of February?

DR. BRANCHE: Yes.

MR. PRESLEY: Okay, that's what I -- I thought somebody said the 25th and I got the 20th there.

MS. MUNN: No, it's the 20th.

DR. BRANCHE: No, it's the 20th. The only thing I goofed up on was the --

MR. PRESLEY: I just -- I heard you wrong, I'm sorry. I just wanted to make sure.

MS. MUNN: Now the action items that I have number eleven and that's if I lump everything that we're doing with PROC92 into one lump, I'll list those later. The first one was SC&A, that's one of yours Kathy, to determine how we're going to present the page number detail on the -- on the Access database. That should be easy enough. Revise the title of the database. Three, presentations and updates, report, a short report in January and a full report in Amarillo.

MR. MARSCHKE: Kathy was going to give a presentation to the Board on the capabilities of the matrix?

MS. MUNN: Yes, uh-huh, yes. Work out all changes to the database; both NIOSH and SCA will be working together on that, I think that will just go sort of automatically. Fifth item, NIOSH will have a response to the OTIB0017, SC&A white paper. Will that be before the Board meeting or will it be after that, Stu?

MR. HINNEFELD: Well we're running out of time

between now and the Board meeting.

MS. MUNN: I'll write in afterwards.

MR. HINNEFELD: If I get -- I'll get it out if I can.

MS. MUNN: March -- well, March meeting probably.

MR. HINNEFELD: That will be a good -- we should be able to make it easily by then.

MS. MUNN: Item six, NIOSH is going to take part -- discuss with Jim OTIB001901 and possibly have a page change to clarify when it's going to be used, that will be the next workgroup meeting, again March or can that be -- that was something we kind of hoped for today.

MR. HINNEFELD: Well, the change was just some specification in that procedure that -- that kind of limits its usage so that you don't just, you know, we can't use it --

MS. MUNN: Right.

MR. HINNEFELD: Setting it for ninety-fifth, if you know, it doesn't need to (indiscernible) ninety-fifth percentile.

MS. MUNN: So that should be okay for the Board meeting, right? Or not?

MR. HINNEFELD: Well --

MS. MUNN: Well, March.

MR. HINNEFELD: I think so, but again, the resources that will make it even though it's a relatively simple change, the people that will do it may be working on other things, so I hate to -- I hate to promise anything in January but I'll provide as much as I can by January.

MS. MUNN: All right. I won't put a -- I won't put a date on it. Number seven SC&A OTIB0025-01, look at the equations being used again. Any comments by the next workgroup meeting, otherwise it's closed. Item eight, NIOSH OTIB12, continue to review, leave it on the matrix where it is right now and respond in the March time frame to the workgroup.

MR. HINNEFELD: Sorry, what was that one again?

MS. MUNN: OTIB12, continue your review, leave it on the matrix where it is.

MR. HINNEFELD: Okay.

MS. MUNN: And respond by March. The PROC92 lists, number one in abeyance, change the term health physics reviewers to something else. Then number two, was where personalization takes over, it's going to change language -- considering changing the language in the procedure itself. NIOSH is going to review the procedure and

identify whether the language needs to be changed. And SC&A is going to provide us with their comments on what needs to be done to actually supplement the discussion. Under action item three under PROC3, NIOSH is going to suggest the changes indicated in the procedure. Finding four was addressed in other findings two, addressed -- addressed in three, addressed in finding two -- so it appears those are the only -- does anyone have other actions, other than what I just read on PROC92?

DR. MAURO: It might be a good idea in the place where you talk about item number two, prior authorization language, to make reference to that this is going to be the home for several of the subsequent comments so the person looking at it knows that they have (inaudible).

DR. MAKHIJANI: Did you mention that SC&A would review and supplement our recommendations?

DR. MAURO: Yes, that was -- that was part of it.

MS. MUNN: Yes, uh-huh. All right. Then we have action item ten PROC90, NIOSH will write the summary for each of the boxes that go in there by the March meeting. Action item eleven, OTIB0023, SC&A and NIOSH are going to provide wording to

incorporate IG number one into this procedure and we'll talk to see about any further wording that's needing -- what's needed to be indicated there. That, hopefully soon. Anything else, Kathy?

MS. BEHLING: Wanda, the only thing I was going to go through are the changes that we wanted to possibly introduce into the matrix. And what I have listed here in addition to what you mentioned was that we would attach or link a white paper to our matrix and I did talk with Don Loomis and he indicated that we should be able to do that. So in our details list if there is a white paper that's being presented we will make a statement to that effect to give maybe a file name and if you click on where -- or select that file name it should open up a link to that white paper so you can see that white paper as part of the database.

MS. MUNN: Excellent, that's perfect for the archives. Great.

MS. BEHLING: Okay. The other thing we said we would do is we're going to be able to sort and print on just about anything in the status column, open items, things that are still in

abeyance, global issues, that type of thing. The third item I have we -- I asked if we were going to be able to search for specific words or terms as we discussed maybe inhalation and have the database return to us all of the procedures and finding numbers where maybe a specific term such as -- yeah, inhalation has been identified as an issue.

MS. MUNN: All right.

DR. MAURO: Kathy, in implementing that is that something that when you're building and populating the database you have to mark that word or can you after -- after the fact say listen, please do a search on inhalation just like you do right now in Word Perfect, I can search on any word after the fact and it will --

MS. BEHLING: It -- it -- I have asked that it will be any word after the fact. It does not have to be -- the only thing we'll have to be a little bit careful of is when we input this data into the database that we choose our words carefully and we try to be consistent so these types of issues can be identified and we can look at them all in a consistent format. The fourth item that I have listed is that we will make the

file available in a read-only format on the O drive, I guess under the Advisory Board folder for -- for the workgroup and the Board to be able to go into and look at and you know, see -- see any updates that we put out there.

MS. MUNN: Great.

MS. BEHLING: The -- okay, you mentioned the file name change and the last issue excuse me, is that I ask that we have an auto date stamped onto the print format each time either NIOSH or SC&A makes a change to the database so that we always know what the latest version -- when the last time there were any modifications made to the database when we go to print.

MS. MUNN: All right.

MS. BEHLING: And I believe that's it. Was there anything else that we committed to changing on the matrix?

MS. MUNN: I don't believe so; I think you were more thorough than I was making notes. I had just assumed you were going to magically do that. Magic. No, does anyone else have anything that you were unaware of? If not, if no one has anything else to add, thank you very much for your efforts, I appreciate your coming, thank you

for all you do, we will see you in Las Vegas.

(Meeting concluded 4:05 p.m.)

CERTIFICATE 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 Dec. 11, 2007; 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 14th day of May, 2009.

_____

STEVEN RAY GREEN, CCR, CVR-CM, PNSC

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