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 Hebron, Kentucky, on May 20, 2008.

STEVEN RAY GREEN AND ASSOCIATES
NATIONALLY CERTIFIED COURT REPORTERS
404/733-6070

C O N T E N T S

May 20, 2008

OPENING REMARKS 6
DR. CHRISTINE BRANCHE, DFO

INTRODUCTION BY CHAIR 10
MS. WANDA MUNN, ABRWH

SUMMARY STATUS AND FUTURE TRACKING EXPECTATIONS 11
MS. NANCY ADAMS, NIOSH

ACCESS DATABASE ISSUES AND STATUS 43
NIOSH

DRAFT OF SECRETARY TRANSMITTAL FOR
SC&A FIRST SET REPORT 50
ALL

DISCUSSION OF PROCEDURE TRACKING DATABASE EXCHANGE 60
HINNEFELD, MARSCHKE

TBD-6000/6001 AND RESOLUTION MATRIX FOR APP BB 100
SC&A

DISCUSSION ON OPEN, OPEN/IN PROGRESS, IN ABEYANCE
AND CLOSED 194
NIOSH

ANTICIPATED FUTURE APPROACH FOR PRIORITIZING
ATTENTION TO ACTIVE ITEMS 227

FINDINGS ON CATI PROCEDURES FROM 1ST SET OF REVIEWS 254
NIOSH/SCA

HOUSEKEEPING; ACTIONS; NEXT MEETING 267

COURT REPORTER'S CERTIFICATE 275

TRANSCRIPT LEGEND

The following transcript contains quoted material. Such material is reproduced as read or spoken.

In the following transcript: a dash (--) indicates an unintentional or purposeful interruption of a sentence. An ellipsis (. . .) indicates halting speech or an unfinished sentence in dialogue or omission(s) of word(s) when reading written material.

-- (sic) denotes an incorrect usage or pronunciation of a word which is transcribed in its original form as reported.

-- (phonetically) indicates a phonetic spelling of the word if no confirmation of the correct spelling is available.

-- "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.

-- “^” denotes telephonic interruption.

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

(By Group, in Alphabetical Order)

DESIGNATED FEDERAL OFFICIAL

BRANCHE, Christine, Ph.D.
Principal Associate Director
National Institute for Occupational Safety and Health
Centers for Disease Control and Prevention
Washington, D.C.

MEMBERSHIP

GIBSON, Michael H.
President
Paper, Allied-Industrial, Chemical, and Energy Union
Local 5-4200
Miamisburg, Ohio

GRIFFON, Mark A.
President
Creative Pollution Solutions, Inc.
Salem, New Hampshire

MUNN, Wanda I.
Senior Nuclear Engineer (Retired)
Richland, Washington

PRESLEY, Robert W.
Special Projects Engineer
BWXT Y12 National Security Complex
Clinton, Tennessee

ZIEMER, Paul L., Ph.D.
Professor Emeritus
School of Health Sciences
Purdue University
Lafayette, Indiana

IDENTIFIED PARTICIPANTS

ADAMS, NANCY, NIOSH
ANIGSTEIN, BOB, SC&A
BEHLING, KATHY, SC&A
BURGOS, ZAIDA, NIOSH
ELLIOTT, LARRY, OCAS/NIOSH
HINNEFELD, STUART, NIOSH
HOWELL, EMILY, HHS
KOTSCH, JEFF, DOL
MARSCHKE, STEVE, SC&A
MAURO, JOHN, SC&A
MCKEEL, DAN
RAMSPOTT, JOHN
SIEBERT, SCOTT, ORAU
STEPHAN, ROBERT, SEN. OBAMA
THOMAS, ELYSE, ORAU

P R O C E E D I N G S

MAY 20, 2008

(9:30 a.m.)

OPENING REMARKS

DR. BRANCHE: Good morning. My name is Dr. Christine Branche. I'm with the National Institute for Occupational Safety and Health and functioning as the Designated Federal Official, also known as Executive Secretary, today. This is the Procedures working group of the Advisory Board on Radiation and Worker Health.

Ms. Munn, are you ready?

MS. MUNN: Yes, I am.

Welcome to everyone here and to our folks who are joining us by telephone.

DR. BRANCHE: I wasn't quite finished, Wanda. I'm sorry, forgive me.

Would the Board members who are in the room please announce your names?

MS. MUNN: Wanda Munn, Chair.

MR. GIBSON: Mike Gibson.

MR. PRESLEY: Robert Presley.

DR. BRANCHE: Are there any Board members participating by phone? Please announce your

names.

(no response)

DR. BRANCHE: Dr. Ziemer?

(no response)

DR. BRANCHE: Mr. Griffon?

(no response)

DR. BRANCHE: Can anyone on the line hear me?

UNIDENTIFIED SPEAKER (by Telephone): Yeah, we're on here.

DR. BRANCHE: Okay, thank you.

I'll go back to the Board members. NIOSH staff who are in the room would you please announce your names?

MR. ELLIOTT: Larry Elliott, NIOSH/OCAS.

MR. HINNEFELD: Stu Hinnefeld, NIOSH/OCAS.

MS. HOWELL: Emily Howell, HHS.

MS. ADAMS: Nancy Adams.

DR. BRANCHE: Any NIOSH staff participating by phone, would you please announce your names?

DR. ZIEMER (by Telephone): Paul Ziemer here.

DR. BRANCHE: Oh, Dr. Ziemer, glad you were able to join us, thank you.

DR. ZIEMER (by Telephone): Good morning.

DR. BRANCHE: NIOSH staff by phone would you please announce your names?

DR. McKEEL: This is Dan McKeel.

DR. BRANCHE: Dr. McKeel, thank you for joining us.

Are there any NIOSH staff --

MS. BURGOS (by Telephone): Zaida Burgos.

DR. BRANCHE: Thank you.

ORAU staff participating who are in the room, please announce your names.

MS. THOMAS: Elyse Thomas.

DR. BRANCHE: ORAU staff participating by phone, would you please announce your names?

MR. SIEBERT (by Telephone): Scott Siebert.

DR. BRANCHE: SC&A staff who are in the room, would you please announce your names?

DR. MAURO: John Mauro, SC&A.

MR. MARSCHKE: Steve Marschke.

DR. ANIGSTEIN: Bob Anigstein, SC&A.

DR. BRANCHE: SC&A staff participating by phone, would you please announce your names?

(no response)

DR. BRANCHE: Other federal agency staff would you please announce your names at this

time?

MR. KOTSCH: Jeff Kotsch, Department of Labor.

DR. BRANCHE: Are there petitioners or their representatives on the line who would like to announce their names?

MR. RAMSPOTT: John Ramspott.

DR. McKEEL: This is Dan McKeel. I'm a petitioner for GSI.

DR. BRANCHE: Thank you.

Are there any workers or their representatives who would like to announce their names?

(no response)

DR. BRANCHE: Are there any members of Congress or their representatives who would like to announce their names?

(no response)

DR. BRANCHE: Are there any others who are participating by phone who would like to tell us your names?

(no response)

DR. BRANCHE: Thank you very much. Just before I hand it over to Ms. Munn I do ask that those of you who are participating by

phone, if you could please mute your phones. If you do not have a mute button, then please the star-six key to mute your phones. When you are ready to speak, then we ask that you use star six to unmute your phone.

It is important that all of you participating by phone mute your lines because it does inhibit the quality of the line and the ability of the participants by phone to hear if you have not muted your phone. I think you'd be surprised how much background noise is picked up. For those of us who are in the room if you could please mute or silence your cell phones we would very much appreciate that. Thank you very much.

Ms. Munn.

INTRODUCTION BY CHAIR

MS. MUNN: Welcome to all of you. I'm assuming that all of you who need a copy of our agenda, have it. Does anyone need an agenda who does not have one in hand or on screen? We have a couple here.

As you all know we have a pretty full basket today. We're going to try to get through all of it if we possibly can. Even

with this kind of load we still have additional material that we're working with that we do not even have listed here. So we're going to have to keep our head down and keep rolling. But I don't want to short-change any of the discussions that need to take place.

A number of things that we have on the agenda are going to require a significant amount of discussion around this table and with our Board members who are on line. So please be prepared to step in with any additional information that needs to be addressed at this specific time forward.

SUMMARY STATUS AND FUTURE TRACKING EXPECTATIONS

Having said that the first item that we have on our agenda today is a brand new one. As most of you know, Nancy Adams has been waiting in the wings for an opportunity to step in and give us the kind of hand that we need to help coordinate some of the loose ends that sort of dangle out at the edges especially when we transfer activities from one working group to another working group or to and from the Subcommittee.

Nancy's first effort was one that I appreciate very much. She's taken a look at our existing database and has put together a summation of the, pure numbers, that appear as a result from that database. I think it helps any time for us to be aware of where we are in terms of the material that we have yet to do and get a little reassurance from what we have actually already closed.

Without further ado, Nancy, if you'd like to provide us with your review of an overview of the summary, where we are right now, we'd certainly appreciate it.

MS. ADAMS: Thank you, Wanda.

I hope I have enough copies here, but I want to pass this out. This is just a little spreadsheet that I put together after going through the database that SC&A developed for this particular work group.

My thought process with this was to try to look at how many records are in the database. What's open. What's closed. And to categorize things by the categories that were already created and exist in the database. So that's open, open-in progress,

in abeyance, addressed in finding, transferred and closed. And down at the bottom, as I understand it, these are the definitions of those titles or those statuses.

MS. MUNN: We might take a moment to look at those and verify that the information that Nancy has here is in fact our understanding of what those terms mean. Because that's key to her breakdown of information here.

MS. ADAMS: So open would mean there's been no meeting discussion on the item on the finding. Open-in progress says that there's some meeting discussion has started, but there is more work that needs to be done on that finding. In abeyance means the finding has been addressed but resolution is that NIOSH will change the procedure. But it's my understanding from the Board's perspective that in abeyance is considered closed.

Addressed in finding means that there's multiple findings in a procedure, and all the findings are affected by a correction of the first. Transferred means that an issue came up, and it got -- and I guess there is some discussion about changing this

terminology to exported or imported because that issue would go to some other work group for resolution or development. And then perhaps return or not return and get concluded wherever it goes.

MS. MUNN: From memory only I believe we did discuss that at our last meeting. Is that the memory of others as well?

Steve?

MR. MARSCHKE: Well, I think we did discuss it, yes, Wanda. But I also know that the database program now has another class called imported where there are currently no findings under the imported class, but there's another class out there which is available for those findings which are imported to the Procedures working group from other working groups I guess. So there is an additional status, if you will, that a finding can have.

I did have some concern as to how to use that term, imported, because really it doesn't really give you much information as to the status of whatever that finding is, whether it was open or closed. But it is out there, and it's in the database. And you can

set a finding as being imported. So we have basically, we have transferred means transferred out. Like you have a transfer here means more or less it's been transferred out of the Procedures working group. Imported means it's been transferred, it's been brought into the working group from another group.

MS. MUNN: So I was thinking of transferred as having subsets, imported and exported. And you're saying that your understanding now is that transferred means exported, and that we already have established the new category of imported.

MR. MARSCHKE: That's the way the database is set up. Right now on the O drive I believe you have these seven status classes to choose from. We can always change that if we want to change it. But, yes, there's a separate class for imported in and a transferred out.

MS. MUNN: Transferred as you understand it now means exported.

MR. MARSCHKE: Exported to some place else meaning another working group or like a, I think one we always use as an example is the inhalation problem where a white paper is

going to be evolved which is going to really address all the concerns.

MS. MUNN: So we don't have Kathy online today, do we?

DR. BRANCHE: Ms. Behling, are you on the line?

(no response)

MS. MUNN: No, so we're going to have to, I guess it would be my preference that before we make an absolute change to your notations here, Nancy, perhaps we should check specifically with Nancy (sic) and perhaps even check with our own minutes to see what our discussion was at the last time we went through this.

Because clearly we have the sense of what's going on, but it seems to me that Steve's saying something a little bit different than what I had in mind and possibly transferred perhaps does need to be changed in its terminology. But we'll, if Nancy, if you would check with Kathy specifically on that so that we could get an e-mail clarifying it?

MS. ADAMS: Sure.

MS. MUNN: I'd appreciate it.

MR. GRIFFON (by Telephone): Wanda, this is Mark.

MS. MUNN: Hi, Mark.

MR. GRIFFON (by Telephone): I just wondered how we have used -- I'm trying to pull the database up right now, but the difference between in abeyance versus closed. If I heard Nancy correctly, we are interpreting in abeyance as closed? I don't quite follow that.

MS. ADAMS: From my discussion with Kathy, in abeyance is kind of in a holding pattern. But from the Board's decision-making status it's closed. It's not closed in the database is how I understood it.

MR. MARSCHKE: The issues that the finding raised, have been resolved. It's just that they have not, the procedure or the document that has not been changed to reflect that resolution at this particular time. That's the category that goes into abeyance.

MS. MUNN: And our previous discussion was this is one of the things that's hanging out in leftfield that we do not currently have a process for tracking, and that we were hoping

that would be one of Nancy's tasks. To follow the in abeyance activities to assure that closure actually comes about by way of documentation in the appropriate procedure that had been culled out.

DR. MAURO: As I understand it from our previous meetings, once the working group decides, yes, this particular issue is going to be assigned a designation, in abeyance, that's a very important step. Because it means previous to that there has been discussion, perhaps an exchange of white papers, and we're sitting around the room, and we all say, yes, we agree that the strategy as proposed by NIOSH is scientifically valid, claimant favorable.

And therefore, at this point in time the only thing that remains is that, of course, at some point in the process, which is convenient to NIOSH as appropriate, that procedure, that OTIB, will be revised. Now I think what's left on the table really is up to the working group whether or not that is the end of the process as far as the working group goes because it may take some time before

NIOSH gets to that revision or maybe not.

But if the working group decides, no, we're going to leave it open; we're going to leave it in abeyance until we actually see the revised Rev. 2, Rev. 3 of the OTIB, give the working group a chance to read it and see if, in fact, it has been revised in accordance with the white papers, any discussions, all of which should be in the archive now on the database, all of that history, and if so, judged by the working group, perhaps with the assistance of SC&A. At that point the working group will say, okay, we believe that OTIB has been appropriately revised, and we now will close. And then the working group will direct SC&A and NIOSH to change that little box from abeyance to closed.

That was the concept. The only thing I'd like to put on the table is we may very well find ourselves in a place where we have a whole long list of in abeyances because it's a long process to revise an OTIB. And whether or not the working group wants to consider that for all intents and purposes closed or let's just leave it calling it that, in

abeyance, that's really your call, how you'd like to manage that information.

MS. MUNN: Well, I'll invoke the Chair's prerogative and say from my perspective, and it's the one I hope we will follow, that we will continue to view that in abeyance list as a task that Nancy's going to undertake for us. That she will track in abeyance as she has tracked this summary of all procedures here and will regularly provide for us as we need it a track of where we are with in abeyance procedures.

As closure comes to pass, she would be the person who would be aware that the change that has been awaited is now before us to see. And with that step in mind my concern over the thread that was hanging out there will be resolved. If that's a process that seems feasible to everyone here, then I would like to suggest that we follow that.

Does that meet your concern, Mark?

MR. GRIFFON (by Telephone): Yeah, I guess I just, I'm concerned that we use this term, in abeyance, cautiously because, I mean, my experience is that oftentimes we don't, we're

very generic in terms of what is going to be done to address a finding. And if you're very generic, how is one going to determine -- I mean, if we have a very specific thing in the resolution that says this is how we're going to resolve the problem in the future TIB, that's one thing. There I could say, fine, we don't need to see the result, the next version of the TIB.

But if we have a response that NIOSH is going to address this in the rewrite of the TIB, that's a very different thing because we don't know how they're going to address it; and therefore, we don't know if it's technically adequate. So I think there's a fine line between open-in progress and in abeyance. As long as it's a definitive resolution in the work group, then I agree we don't have to wait to see the final reprinted version in the TIB. But I guess that would be my only concern.

MS. MUNN: Nancy's tracking of the in abeyance can very easily identify what we're waiting for. What the in abeyance is. And that should make it easier for us on a regular

basis to see what we're waiting for and what progress is being made.

MS. ADAMS: That's absolutely correct assuming that whoever is putting data into -- and please, bear with me here since I'm the new kid on the block -- that the data that's going into this database is coming from somewhere where the notes are being taken such that you can delineate what that exact issue is. So when you go back through the detail report, and you look at the recommendations from the work group, it just doesn't have a generic phrase in there that says NIOSH is going to fix this.

DR. ZIEMER (by Telephone): Wanda?

MS. MUNN: When you see that, that's part of the thing that goes on your list. I don't know what you're expecting here needs to be on the list. And that's our job then to make you aware of that.

MS. MUNN: Yes, was that you, Paul?

DR. ZIEMER (by Telephone): Yes, I just wanted to indicate I share Mark's concerns. I think if Nancy tracks this properly, we can differentiate between those two cases. But

certainly we want to be able to periodically review the status of the in abeyance items and make sure that what is supposed to happen does happen.

MS. MUNN: I think we'll try that for next time, Nancy. And at that time you'll be able to identify any in abeyance items that do not have clear delineation as to what action is expected. If we try to make sure we get off to a good start with this particular tracking system, then perhaps it will just become second nature to us to make sure that it goes onto the archive record appropriately.

MR. MARSCHKE: Wanda?

MS. MUNN: Yes.

MR. MARSCHKE: Right now the way actually we've been operating the database is that we do not really change, we don't make any unilateral changes to the status box. Everything basically, we wait for the Board's okay before we make any changes to the status box. And so in that case, I mean, everything that is in abeyance we would have to wait for the Board, or not the Board but the working group, to tell us that, okay, it meets our

standard; it meets the resolution before we change it from in abeyance to closed.

MS. MUNN: That's my expectation, Steve. I would expect that to continue.

MR. MARSCHKE: Yes, and so you will have, I mean, the working group will have another shot at looking at any resolutions that are proposed for in abeyance findings to make sure that you agree that they do, in fact, address the finding, and the finding is, in fact, closed.

MS. MUNN: I believe that philosophy was the sense of the group at the time we set up the database.

I'm sorry. Back to you, Nancy.

MS. ADAMS: So this spreadsheet basically takes the six dates that findings were submitted and then spreads out what the status of those total findings are. So for the findings that are dated the 17th of January, 2005, according to the database there are a total of 182 findings.

Currently, 29 of those are open, which means according to this definition, that there's been no meeting discussion on 29 of

those 182 findings. There are none in progress. There are 54 in abeyance. One has been transferred and 98 are closed.

MR. MARSCHKE: The 29 that are open are the 29 that were associated with PROC 4, 5 and 17, and that got transferred to PROC-0090. So it's a little bit, I don't know if they -- let's see -- so right now all of the 29 are all findings associated with PROC-0090, and they all got transferred into PROC-0090 from four, five and 17. Those were the ones that were reviewed.

MS. MUNN: And we have cleared PROC-0090, have we not?

MR. HINNEFELD: No.

DR. MAURO: No, it's an open item.

MS. MUNN: It's still an open item.

DR. MAURO: That's one of the CATI ones that are on your agenda.

MR. HINNEFELD: Yeah, it's the CATI procedure.

MS. MUNN: So what I think I'm hearing from Steve is that we actually don't have 29 open items. We have 29 exported items.

MS. ADAMS: What about PROC-0006, which is

open?

MR. MARSCHKE: I didn't find PROC-0006. I didn't find a PROC-0006. I think it was four, five and 17.

DR. MAURO: In theory it should all be on the system. In other words right now the matrix is fully loaded, and it's all, in effect, what we're looking at is a boil-down of 400-and-something findings, sorted and boiled down so that we can get a bird's eye view. If there are any questions related to how we boiled it down, it should be on the matrix.

I don't know whether or not we have access to the matrix to see where six is. So in theory if there are any questions about whether or not this is a faithful representation of what's in the big database that's, you can always go back to the database.

MS. MUNN: Right, and that's, I guess I would ask that you make note of that item, Nancy, and that you and Stu take a look at that to see if it is appropriately an export item rather than --

MR. HINNEFELD: It's not. There aren't any on PROC-0006 from the January '05 review. There aren't any on PROC-0006 that are open according to the database. There's one in abeyance.

MS. ADAMS: Maybe this item got changed with that update.

MR. HINNEFELD: Well, when did you look? Because this is about 11 days old. The ^ is about 11 days old. As far as I know, nothing else has been added. This is after we added the information I sent to you, and so as far as I know, nothing's been added. Maybe it was changed at that point.

MS. ADAMS: This report that I'm looking at that's got the page on the PROC-0006 item is from the old, the 3/10 update.

MR. HINNEFELD: Okay, it's been changed since then.

MS. ADAMS: But then somebody has changed the status of an item that occurred without this Board or without this work group making the change.

MR. HINNEFELD: Well, it could be an incorrect initial assignment. It could be

they realized that they had picked the wrong button. Because I noticed on the agenda, this procedure has been reviewed again later. PROC-0006, Rev. 1 has also been reviewed. So I would not think that there'd be anything hanging out open for PROC-0006, Rev. 0 when PROC-0006, Rev. 1 has been reviewed as well.

MS. THOMAS: Well, we can look at this.

MS. ADAMS: Anyway so you go down for each of these items, each of the finding dates of what was submitted. You can see across the spreadsheet what the status of things are. So in total there's 238 items that are open or 51 percent of the findings. And 143 have been closed or 30 percent of the findings. And then you've got the 20 percent that's hanging in the middle.

MS. MUNN: From my perspective this is an excellent overview and a good thing for us to be doing on a fairly regular basis. We've identified about three things that need to be worked out, little glitches that we need to come to some closure on in order to begin to put very much weight on the numbers as they exist here. Hopefully, we'll be able to do

that without too much difficulty.

MS. ADAMS: In trying to become familiar with this database there's a little piece of information between the totals and the definitions at the bottom that talks about priority identified in the database. And this was in the abeyance piece. It looks as though during the submissions of the findings associated with January 2005, there was some attempt made to rank low, medium or high the priority of those in abeyance items.

So where I could find it, that's what that is. So these all only relate to January 17th, but in that set there was only one identified as a high priority, ten as medium and 17 low. And then 39 of those 54 didn't have any identification as to priority at all. So I don't know if that's important, unimportant, but it's just another piece of information for you.

MS. MUNN: Thank you, Nancy. We felt that it was important the reason being that there was such a large number of findings there that we felt it was necessary to prioritize what we were going to be looking at, otherwise there

was no logical way to address them. If many of the findings were of relatively low impact and not likely to affect the outcome of any cases that had been observed up to that time, then we felt that it was a judicious use of our time to address the large, more contentious issues on a priority basis. That's why you saw those ratings.

We have perhaps not been as effective in a mechanical way in doing that with our later activities, but as a practical matter we have found it necessary to address more pressing items ahead of items that were deemed to be more routine. So, yes, that is good information and perhaps we may want to do a better job of documenting our assessment of those priorities for some of the later datasets that we have as well. But for the time being thank you for that. It is helpful certainly.

MS. ADAMS: The two items that, based on my review of the database that I think might be advantageous from a tracking perspective that currently aren't available, are there's no closed date field in the database for each

item. So if you wanted to track over time, you have to physically go back in the detail report for every single record and see what the last meeting date was and determine if it's closed. And that's a tremendous burden when a computer could do that quickly for you if you entered a closed date.

And the other that just became obvious after the database was updated just a few days ago is that there's no way to filter for what items were updated. So again, you would have to go back through, manually look at all of the detail reports to see what was physically updated in order to figure out what in the database changed. So to be able to filter on latest records updated would be extremely beneficial.

MR. MARSCHKE: We can make those changes if that's what the working group wants us to do. We can implement those two.

MS. MUNN: Certainly the closed date would seem to be a no brainer.

MR. MARSCHKE: What I would recommend on the data is I would recommend that we put a date associated with the status. Whatever the

status is whether it's open, closed or whatever it is, we have a date associated with that status which basically you can then look at and see when that status was set.

DR. ZIEMER (by Telephone): Steven, is that the most recent time the status changed? Is that what you're saying?

MR. MARSCHKE: That's what I'm saying, yes.

DR. ZIEMER (by Telephone): Yeah, that makes sense.

MS. MUNN: But don't we already have, we already have, we date every entry on the database.

MR. MARSCHKE: But we don't have it as a separate field associated with the status so you can't really sort on it.

MS. MUNN: Okay, so it's dated, but we don't have it in a database field.

MR. MARSCHKE: Yeah, when we basically, like when we had this working group meeting today, if we talk about specific findings, we will go and we will add a sub-record to each finding and say, okay, we talked about this finding at this date, and maybe we changed the status. That will be kind of down in the discussion,

and John says the history of the finding and not, you won't be able to specifically sort on it when you're looking for when was these things closed.

DR. MAURO: What I'm hearing is though the record itself, the big record itself, is embedded in, every meeting we have, in this meeting, whatever we talked about, whatever white papers, whatever direction we give, whatever decisions are made will be in there.

But what I'm hearing is, in other words there are certain parameters that we like to roll up on. For example, I'm hearing that you'd like to be able to, just like you rolled up on some of this, you'd like to roll and say, okay, what was the date when, for every item, which one was changed, the date of the most recent change.

I guess that's what I'm hearing. We have 400-and-something findings all together, we roll them all up in that order. And what I'm hearing is you'd like to know out of the 400 findings, in other words you could have the status of each and every finding if you wanted that, but what I'm hearing is you'd

like to have another column in the roll-up sort of the date when that particular finding was changed from its previous status to its current status. Is that what I'm hearing?

MS. MUNN: I believe that's true.

Stu?

MR. HINNEFELD: For utility I would offer that rather than a status change date, you'd want the latest entry date. Because, for instance, we would write an initial response. When there's a finding and we've not written an initial response, we write an initial response and put it in the database. Then find that, well, we could notify everybody new information has been added to this finding in the details page. I mean, that's one way. Or if you had a date updated, you, people from members of your staff, could look for what's been changed in the last week, has NIOSH put anything in the last week. Similarly, if you entered additional information, for instance, we provide an initial response. We have a meeting. You say, well, what about this. You provide additional information on some date. Then we could then see, if we knew the date

entered, we could see, okay, you have added additional information and start working on that. So to me the status date we can certainly capture and do that, but that won't complete -- what Nancy said to me was difficult because I've not really looked that much, the difficulty being if you've got an old version and a new version, how do you know what's changed? How do you know what's changed over time? So I think the date of entry kind of thing would be better.

MR. MARSCHKE: Well, the last change date is in there.

MR. HINNEFELD: It's in the database.

MR. MARSCHKE: You just can't sort on it. So basically you keep, but you don't know what changed on that. You know that the record, the information on that finding has changed. You don't know what specifically was changed, that's true. But you can go and look then you see --

MR. HINNEFELD: It allows you a limited number of findings. If I'm going to see do I have something that updated I should respond to, read and consider whatever it is what my

action would be. It allows you then to be able to find them electronically. The other option would be for us to religiously, when something is entered, notify the work group members and then each person notified would need to keep a record of the notifications they received so when they get time to look, they'd be able to look. Either way you've kind of got to keep a record of when you look at the database. Even if you have the latest update dates, you have to keep a record of when you look so you know what to look back to, what dates to look back to when you look at the change.

DR. BRANCHE: Excuse me. I ask that whoever, the people on the line would you please mute your phones? Thank you.

MS. BEHLING (by Telephone): This is Kathy Behling. I joined you.

John, I'm on the line. I apologize. I'm on the phone in the car. I don't know if I can contribute anything or not.

DR. MAURO: Kathy, thanks for joining in. I'm glad that you're able to join us.

MS. MUNN: And we're sure you can

contribute. There's no question. I think -- I'm repeating what John said earlier. I believe that what I'm hearing is the information that we need is in the database. It is just not there in a method whereby we can sort on it.

MR. HINNEFELD: I believe that's the case.

MS. MUNN: Because I know we were very clear at the time we were asking that this be set up. And I know Kathy was very perceptive in suggesting from the outset that everything that goes in has a date attached to it so that we would know when this occurred. So I know that the date's there, but what we're hearing is we can't sort by it.

And not being a database manager and software being a long way from my strong suit, there's no way that I can identify how complex that might be.

Kathy, can you help us?

MS. BEHLING (by Telephone): I'm sorry. I'm not hearing very well, but I assume it has to do with the fact that you're trying to ensure that you know the date when everything has been entered?

MS. MUNN: No, we're trying to make sure that we can sort. Two things, we need to be able to sort, we need to see the date that closure occurred, and we need to be able to sort on the date, on the most recent date of changes to each of the outstanding items.

MS. BEHLING (by Telephone): Okay. Well, currently in the filter screen there is a field that says updated on. And this may not be as precise as you want it to be, but let's say we put in January 1st, 2008. Everything that was changed from that date on, those records will show up when you hit enter on that filter screen. But it sounds like you want something a little bit more precise than that.

DR. MAURO: Let me jump in. I think we're at a good place. Let me explain how I see this. Where we are is that we created a database that contains all the information we want. The problem is it's big. It's hundreds and hundreds of pages and everything is in there. And really the service it provides is a great archive.

But now we've got to make it

functional so that when we sit around the table like this and someone says, okay, when was the last time, let's get a listing of the last time every one of our findings have been updated. In other words we want to pose questions to it so that what we're really asking now is almost like metadata. That is, all the data's there, but we want the wherewithal to be able to pull out --

MS. BEHLING (by Telephone): Okay.

DR. MAURO: And one of the things that became apparent was that it will be really nice to say we have to go in and say for any given procedure, for any given item that has been, let's say, changed, that is new information was added --

MS. BEHLING (by Telephone): Okay.

DR. MAURO: -- we'd like to know the last date that that issue was changed or the database was changed.

MS. BEHLING (by Telephone): I believe that we have everything in place to be able to do that because I know we have a date associated, as Wanda just said earlier, we have a date associated with everything. If there's an

SC&A update, there's a date that says that was updated. So we just have to be able to sort on that and add that as a sort into our filter screen. So that's not a problem. I believe everything exists, everything in the database is already there and exists. It's just adding some filtering to our filter screen.

MS. MUNN: You just confirmed what I believed to be the case, Kathy. That's good. If we can in fact do that, then we're in good shape.

DR. MAURO: In fact, where we are is as we work with the database and have meetings such as this, and the work group says, geez, it would be really nice if we could do this. You just let us know what it is, and the next day it will be done.

MS. BEHLING (by Telephone): And I don't think it will be any major changes because I think everything already exists. We simply have to put something in to sort on it. That's easy.

MS. MUNN: Good. If we can see that that gets done, I think the general consensus here is we need to do that.

MS. BEHLING (by Telephone): Okay. The only other thing that I believe Nancy Adams has requested, and I think this is a very good request, is once an item is closed, let's have a closed date. And so I don't know if you've had any discussion on this, but I think that might be a field that we need to add and that is a good field that doesn't currently exist. And we can easily do that also.

MS. MUNN: That's where we started, and that's what we want to have happen.

MS. BEHLING (by Telephone): Okay.

MS. MUNN: Thank you very much.

MS. BEHLING (by Telephone): Okay, very good. I'm going to hang up here.

MS. MUNN: One other thing before you go, Kathy. We discussed the issue of transferred classification and whether or not we were going to have input and outgo in the same category or whether we were going to have imported as one classification and exported as a second classification rather than transferred. Do you have any feelings about that?

MS. BEHLING (by Telephone): Well, Don

Loomis and I have talked about that a little bit too, and we have it transferred now because a lot of what we do with Task Three is simply transferring within Task Three to like global issues and that type of thing. But we had also talked about saying exported to, so we know when new databases are created where it's going to go to.

And we can certainly think about that and maybe make an additional, and export, and transferred means when it's transferred within that database, we'll use the word transferred. And if it goes out of the database, we can use the word exported possibly. That's something you may want to consider.

MS. MUNN: Well, we've asked Nancy and Stu to take a look at that and think about it a little bit as well. So perhaps the three of you might be involved in an offline discussion and make some decisions as to how you think that might best operate, as long as we have a clear delineation of the difference somehow that we can sort on the difference between imports and exports --

MS. BEHLING (by Telephone): Okay, very

good.

MS. MUNN: -- the broader issue.

MS. BEHLING (by Telephone): All right. I'll hang up here since I'm driving.

MS. MUNN: Thank you so much.

Are we okay, Nancy?

MS. ADAMS: I believe so.

MS. MUNN: I think we have the only real issues that we have had identified so far we covered.

ACCESS DATABASE ISSUES AND STATUS

If we're happy with that, let's go on to the concerns that we were having with respect to the ACCESS software and where we're going with that.

MR. HINNEFELD: Our concern with ACCESS is that it works well when everybody's using the same computer system, and it will support local users on the same system. But because of computer security issues, we at ORAU do not use the same computer system. There's a firewall between and data gets replicated back and forth routinely as we need, you know, the information that we want to share with each other gets replicated back and forth

routinely.

So because of that the ACCESS database version that we see is replicated over our side, it’s very important that we not write to it because if we tried to do that, it would write over or corrupt other information. It could do it on the other side. So when it comes over to our side, we only see, we get a read-only. And we can sort. We can do all that stuff, but we can read-only.

Our technical support team folks said, listen, we can change this and put it on a SQL engine, which is a different database language that Don Loomis is very familiar with. If we put it on a SQL platform, SQL will take care of it and will allow all updates to come from multiple locations and write back. And this is what my TFD guy told me. I don’t know any better.

So what we would like to do is to put this database in a SQL format, and in fact, we have a document review application that we think is malleable or can be made to look a lot like this and serve this function. It would allow us to write directly so we could

make our entries directly into the database as well as anybody who has rights, writes on the ORAU side or at SC&A or Board members.

Anybody with write authority could then write to it from their own system. This latest round when we sent updates to be added, we sent them over to Steve, and Steve put them in the database for us. That's how our information got added. We can do that but it gets pretty cumbersome, especially if we start expanding this to more and more databases.

More and more if we get other work groups using this, if we have global issues database and things like that, it will really, really get difficult to keep track. So our view is that it's preferable to have the additional databases built in SQL, change this one to SQL and have it essentially look and act the same and proceed at pace with that.

Now, our technical support team is in conversation with Don Loomis at SC&A. I think Don knows SQL really well and thinks, okay, he's willing to go along and do his part in that. And he had just today, I guess, or last night had shared with Don what we had so far

on our document, the way our document review database looks now so that he can, but we know there are additional things that have to be done in order to accommodate this.

Because right now it's been for our internal stuff, and we would intend to continue to use it for our internal documents, like the ORAU documents, so that's stuff that never really gets published. But if we can use the same system, the same engine and just have certain parts that are broadly available to the Board and SC&A on the O drive on the ORAU system and that we could use as well.

So that's our intent or that is our hope. And I know that Don Loomis at SC&A and Leroy Turner on our staff are in conversation about seeing what we can do about getting this done. The first item would be a SQL version of this database so essentially it looks the same and does the same. That would be the first step.

MS. MUNN: Is there any barrier either procedural or legal that is in the way of our making that change?

MR. HINNEFELD: I don't believe so. I guess

Don, if he's familiar with SQL, there must be a license for it on the SC&A side. Our license covers all the other users. So I don't know what other barrier could possibly be. And if you don't have a license I guess it would be a reimbursable expense.

DR. MAURO: It makes sense that this becomes, if this is going to become institutionalized across the board, it should be a NIOSH server product whereby through NIOSH and its controls contractors, whether it's SC&A or some future contractor, can also learn, access it in accordance with appropriate protocols loaded.

MS. MUNN: Absolutely.

DR. MAURO: So this should not be SC&A's.

MS. MUNN: No.

DR. MAURO: We have to move this out, and it should be NIOSH's. And I have no doubt in my mind, just like we have access to the O drive, and we can download information. This will be a little different because now we'd actually be writing to some dataset within your system. But I believe you'd probably have to control it so that we are limited only to that

function within the system. This is the way it has to go.

MR. ELLIOTT: Thank you, John, I echo your comments. And I would also add to them that as each of the other working groups evaluates the utility of this database you created for your working group, Leroy Turner and our technical support team can modify in SQL the application for a given work group to their desires. So I think that's an important valuable aspect of NIOSH taking this over. Because you're going to have, I suspect, several working groups wanting to avail themselves of this system, what they've done.

MS. MUNN: I anticipate that's in the wings very shortly.

MR. ELLIOTT: And at some point in time as we, in our IT security efforts within the government become, we have to undergo certification and accreditation of all of our systems, and it's best if we use one platform, one software platform system.

MS. MUNN: Paul, Mark, do either of you have any comment in that regard?

DR. ZIEMER (by Telephone): This is Ziemer.

I think it makes sense, and I think that's the direction we should go.

MR. GRIFFON (by Telephone): Yeah, I agree. It makes sense.

Hey, Wanda, another question. I'm looking on the O drive for this database, the existing one. Can you help me out where it's located?

MS. MUNN: I can't, perhaps Stu can.

MR. HINNEFELD: Is there an SCA Advisory Board Review folder?

MS. ADAMS: The first folder, I think, is the AB Document Review folder, and then the second folder is SC&A Advisory Board. So you click on that one, and then it'll say -- and again, I'm just going from memory here -- but I think it says SC&A Tracking Database.

MR. GRIFFON (by Telephone): Okay, I'm getting a no access allowed to the SC&A Advisory Board folder, that subfolder, for some reason.

MR. HINNEFELD: Well, I'll see if I can get it fixed today.

MR. GRIFFON (by Telephone): Yeah, all right, thanks.

MS. MUNN: It sounds to me as though there's consensus and doesn't seem to be any real reason not to continue with the S-Q-L platform for operating this database in the future. Let's do it. Anything else in that regard?

(no response)

DRAFT OF SECRETARY TRANSMITTAL FOR SC&A FIRST SET REPORT

MS. MUNN: If not, let's move to the next Procedures agenda item, which is the transmittal letter to the Secretary. I'm assuming that everybody is quite happy with the 20-page report that we've been trying for the last month and a half to get transmitted to the Secretary, and that there's no problem with that. So what you have before you is my suggested transmittal, which I sent to you day before yesterday.

DR. BRANCHE: It's just one page, not 20, right?

MS. MUNN: It's just one page. My transmittal is one page. The SC&A report is -- I'm just thumbing through my paper here. I love to thumb through paper, but does anyone have any concerns with that? I have not received any comments or corrections. Is that

letter effectually saying what you feel needs to be done to transmit that report?

DR. ZIEMER (by Telephone): Wanda, can you hear me? Am I on mute?

DR. BRANCHE: No, we can hear you, John.

MS. MUNN: No, we can hear you, Paul.

DR. ZIEMER (by Telephone): I just got it late yesterday so I didn't respond. What I would like to do is add a sentence I think at the beginning of the second paragraph, just before you say in order to assure completeness and scientific validity. I would like to add the sentence, which is basically from the Act itself that charges the Board with the responsibility of scientific validity of the work so that this basically is clear that that's why we're doing this.

MS. MUNN: Sounds like a good idea.

DR. ZIEMER (by Telephone): If you would agree as a friendly amendment that we add a sentence which delineates the Board's responsibility for assuring scientific validity in the program. And then we'd say in order to assure completeness, scientific validity of procedures being used that we do

this. And also the only other point there we may want to say procedures used by NIOSH and its contractors or contractor.

MS. MUNN: May I request that you send me both those items, or if there are more, that you send them to be my e-mail? So that I can incorporate it into the text of what we have.

DR. ZIEMER (by Telephone): And actually, I don't know if I, since I'm in a remote location and don't have access to my files, I'm not even sure I, I'll see if I can pull this material from what I have with me.

MS. MUNN: I don't think there's any reason for us to rush with this, Paul, as long as we know what your concerns are and what the additions are that you would like to make.

DR. ZIEMER (by Telephone): Well, I'll be back home at the end of the week.

MS. MUNN: The end of the week, certainly, I don't think anyone on this group is going to be concerned with that. In any case it's my understanding that we have to have the full Board's approval before this can go out. And if that is the case, then we certainly need to get anything that we're going to propose out

to the full Board within the next couple of weeks so that they have plenty of opportunity to raise any concerns they might have before the full Board meeting. But I think we're going to have to wait for the full Board to get final approval to send anyway.

MR. GRIFFON (by Telephone): Wanda?

MS. MUNN: Yes.

MR. GRIFFON (by Telephone): One small comment on the fourth paragraph. It says, "After the Board's selection of a third procedure," I think you mean a third set of procedures --

MS. MUNN: Yes.

MR. GRIFFON (by Telephone): -- for review, right?

MS. MUNN: Yes, I do.

MR. GRIFFON (by Telephone): Instead of a third procedure.

MS. MUNN: Yes, I'll make that change right now.

MR. GRIFFON (by Telephone): So I just reworded that a little bit, third set of --

MS. MUNN: Set of procedures --

MR. GRIFFON (by Telephone): -- procedures

for review.

MS. MUNN: After the Board's selection of the third set of procedures, it was observed, et cetera.

MR. GRIFFON (by Telephone): Yeah.

MS. MUNN: Okay, got it.

MR. GRIFFON (by Telephone): And then the attached 20-page report, do you know when -- I'm sure I have that, but can you tell me when that was sent to us?

MS. MUNN: Yes, I certainly will. It was sent out on the 30th of March. And actually, it was handed out, a printed version of it was handed out to everybody at the last full Board meeting. So a hard copy was in-hand for everybody. If you'd like me to re-send that to you, I'll be glad to do that.

MR. GRIFFON (by Telephone): If I don't find it, I'll let you know.

MS. MUNN: Good. Do.

Any other comments, additions, subtractions, concerns?

(no response)

MS. MUNN: If not, I will await e-mail from folks to make comments to make sure that we

have your suggestions in writing. I'll incorporate them, send them back out again to this working group for any final thoughts. And barring none, I will see that the letter is forwarded to the entire Board so that we can ask for it to be an agenda item on our next full Board meeting.

Any other concerns with regard to that letter and that transmittal?

(no response)

MS. MUNN: If not, it's time for our break. We're right on time. We will take a 15-minute break.

Hold on just a moment. John?

DR. MAURO: Before we break, a real quick question. There is this roll up table that Nancy prepared. One of the things we didn't talk about is this is probably something you'd like to have automated. In other words, Nancy, I guess you had to work real hard to extract this information? Was it easy to pull together?

MS. ADAMS: It wasn't so bad.

DR. BRANCHE: She's being nice. She had to put some time into it.

DR. MAURO: All I'm saying is if the working group feels that there's a certain cadre to kicking off a meeting like this, we'd like to get a bird's eye view of where we are, and it may be a single page like this that will help us understand where we are at this point in time. My guess is you can just automate it and just hit it and out it comes.

DR. ANIGSTEIN: Don Loomis can program anything.

DR. MAURO: I know, I'm saying --

DR. ANIGSTEIN: So what I'm saying is he would need to write some kind of a program or routine into that, and you just hit a button, and it would come out.

DR. MAURO: Right. I've seen Don do this. The only reason I bring this up is that if it turns out we want to really get into, let's say, a process, an automated process, and we all agree this is the way to get through this thing, if there's a form that you'd like to generate prior to every meeting so that we could all have a bird's eye view of where we are, you just let us know what you would like that form to look like, such as this one, and

we could have that prepared in no time and have it available. My guess is to get to this it may not be as, I know I would have to take a lot of time to do this. I'd have to work my way through it. You could sort on the first set, the second set, the third set. You could roll them all up. In other words whatever the working group feels would be a nice way to roll things up so that we could all start from the same corner, my guess is it's pretty easy. I'm talking about less than a day's work to write.

MR. ELLIOTT: I think here again, we would say that NIOSH should make that kind of a user need change. There's a series of reports functions that could be added to the program that our folks have off the shelf. So if this is the kind of report you want automatically spun out at your beck and call, that could be accommodated.

DR. BRANCHE: This is Christine. The only thing I would caution is that part of what Nancy's trying to accomplish is some uniformity across the work groups. So while this suggestion is a good one, I would just

offer that if, once Nancy has a better sense of, or has been able to accomplish some unanimity across the work groups so that whoever is going to spit out, can spit it out. We're not doing 17 different versions. So I just want to caution that that's what Nancy's trying to accomplish.

DR. MAURO: Passing the baton to what Larry said is very important. It looks like we're real close. In other words instead of going Don Loomis, it's over at NIOSH. And really, we're there in the background to be part of the functional team working with everyone, but the driver from then on in terms of software development and Board preparation, that will all be NIOSH.

MR. GRIFFON (by Telephone): And Wanda, before you take your break, can you e-mail me that report? I can't seem to find it on March 30th.

MS. MUNN: I'll send it to you right away, Mark.

MR. GRIFFON (by Telephone): Thank you.

MS. MUNN: You're most welcome.

And yes, I believe it was the intent

of the working group from the outset that Nancy would accept this function and would be doing this on a routine basis for us probably in the future. How often? We don't know. At every working group? Possibly. But that was, I think the generalized expectation.

MS. ADAMS: And the other thing, too, is these happen to be the categories that I pull from the database. If there's stuff that's not here because I don't know that it's important or I don't know that it's of interest, this is the mechanism to let me know. And that when we devise whatever report or reports there will be from this system that all that information's available.

DR. BRANCHE: I would still suggest whatever suggestions you have take them to the respective work group chair so that that person can have the final say over the element. So if you could make those -- you can copy Nancy, but it really does need to be the work group chair who makes the final decision.

MS. MUNN: That's what I anticipate we'll do. Thank you. We'll be gone for 15 minutes.

DR. BRANCHE: We'll put the phone on mute.

(Whereupon, the working group meeting recessed from 10:30 a.m. until 10:45 a.m.)

DR. BRANCHE: Ms. Munn is ready to start again with the Procedures work group meeting. Could someone please let me know that they can hear what I just said?

DR. ZIEMER (by Telephone): This is Ziemer. I'm hearing you loud and clear.

DR. BRANCHE: Thank you, Dr. Ziemer.

Ms. Munn, it's all yours.

DISCUSSION OF PROCEDURE TRACKING DATABASE EXCHANGE

MS. MUNN: As most of you know there's been an exchange of e-mails recently with respect to the database and some changes that have been made.

Stu, do you and Steve want to see where we can go from here?

MR. HINNEFELD: Yeah, this could be pretty short because I think we agree. We originally -- I think actually ORAU in viewing the statuses on some of the findings felt like there were certain ones that could be listed as closed because the action had been taken care of or the database says no further

action.

So I gathered those and sent those over to, I sent those to the work group and to some of the SC&A principals. Steve Marschke then responded and agreed with some of them and said, well, no, we don't agree on these others because this. And I agreed with Steve's response on the argument with what he said. So we can go through those and talk about the status changes if you want.

MS. MUNN: I think for the record it would be a good thing to do simply because the last e-mail that I had indicated that there were some differences.

MR. MARSCHKE: I have handouts if somebody -- of the response that I put together. I don't think I have enough for the whole group.

DR. BRANCHE: Can we make copies?

MR. HINNEFELD: I don't need it. I've got it electronically.

MS. MUNN: Yeah, I don't need it either.

MR. MARSCHKE: If somebody needs one, they're here.

DR. BRANCHE: What about Dr. Ziemer and Mr. Griffon? Do they have it electronically?

MS. MUNN: They have it electronically, I believe.

DR. ZIEMER (by Telephone): Was this within the last day or so?

MS. MUNN: Yes. This was, the dates of the e-mails were -- hold on just a moment --

DR. BRANCHE: It's an e-mail from Wanda that she sent on --

MS. MUNN: -- the 16th, I believe, I sent out, yes, on the 16th.

DR. BRANCHE: I have actually it's an attachment to two different e-mails, one from Stu on May 9th, and then Steve on the 18th. And then you forwarded it to me and several others on the 18th is what I have from Wanda.

MR. HINNEFELD: Steve's response includes my initial, submittal of the language from my initial submittal. So if you find Steve's response, you don't need to find mine.

DR. BRANCHE: I just don't have any tracking here to indicate, Wanda, that you sent it, you must have sent it under separate cover to the work group.

MS. MUNN: No, I sent it on the 18th.

MR. GRIFFON (by Telephone): Is it called

"Response to Stu" --

MS. MUNN: Yeah.

MR. GRIFFON (by Telephone): -- @ K-M-V dot-dot?

MS. MUNN: That's it.

MR. GRIFFON (by Telephone): Okay, I've got it.

DR. ZIEMER (by Telephone): What's the date of that one?

MS. MUNN: 5/18.

DR. ZIEMER (by Telephone): Eighteenth?

MS. MUNN: Did you find it, Paul?

DR. ZIEMER (by Telephone): No.

DR. BRANCHE: Well, the name of the actually the subject line for the e-mail says "Suggestions --

DR. ZIEMER (by Telephone): I think maybe you sent that to my Purdue e-mail.

MS. MUNN: I don't think so. I've tried to get the Purdue off it.

DR. BRANCHE: Paul, the subject line says "Suggestions for Procedures Tracking Database". It's the attachment that's called "Response to Stu-dash-K-M-V dot-dot.

DR. ZIEMER (by Telephone): Yeah, I know

that I've read it in the last couple days, but it's not on my regular e-mail. I'll open my Purdue e-mail while I'm here. I think that's where it ended up. Go ahead.

MS. MUNN: All right. So we start out with OTIB-0007 rather than -0017, right?

MR. HINNEFELD: That was my typo, ORAU typed it right.

MS. MUNN: So this is okay. It should be in abeyance, correct?

MR. HINNEFELD: I think that's how it went, right?

MR. MARSCHKE: It should be closed.

MR. HINNEFELD: Yeah, it should be closed.

MR. MARSCHKE: It's permanently in abeyance, and it should be closed.

MS. MUNN: Seven is now officially closed.

PROC-003. So is the table going to be carried forward or not? It was --

MR. HINNEFELD: It was not. The findings were against the table, and the table was not necessary. So it was not included in the superceding document.

MS. MUNN: So that's closed as well.

OTIB-0002.

MR. MARSCHKE: OTIB-0002 is all this table that's on the next, the details are over on the next couple pages.

DR. ZIEMER (by Telephone): I did find my copy. Thanks.

MS. MUNN: Good.

Is the agency and the contractor in agreement with the Table 3.1-1 as it's now shown?

MR. HINNEFELD: I agree with what Steve sent.

MR. MARSCHKE: That's Table 3.1-1 of the third review.

MR. HINNEFELD: Yeah, when we reviewed OTIB-0002.

MR. MARSCHKE: When we reviewed OTIB-0002. This is essentially data --

MR. HINNEFELD: So you probably, you didn't repeat these findings exactly, right?

MR. MARSCHKE: Well, this table was ripped right out of that report except for what I added in red, what was added in red.

DR. MAURO: I guess on this copy the red is the light-colored version.

MR. MARSCHKE: The red is the lighter color.

MS. MUNN: So there are still responses pending.

MR. MARSCHKE: There's action items both for SC&A, as I identified it, and for NIOSH.

MS. MUNN: Identify new findings. So we have action items embedded in that table that may not --

MR. HINNEFELD: Well, these action items clarify what has to happen back on the details.

MS. MUNN: On the OTIB itself.

MR. HINNEFELD: I mean, you could attach this response or the table I would think. I don't know if that would be helpful or not to attach this table in the database to this finding.

MR. MARSCHKE: Most of these things they're --

MR. HINNEFELD: They're already there.

MR. MARSCHKE: I mean, if we want to pull up the database, we can pull up the database and look.

MR. HINNEFELD: Yeah, let's look if I can get through to anything. It doesn't maneuver very well for me because -- which one are we

on now? OTIB-0002. It just takes a little while. It's not very fast anyway with wireless. It's so much slower. OTIB-0002, Rev. 0 or Rev. 1? Yeah, Rev.1.

So far when I've tried to maneuver on my laptop sometimes the little tabs or details disappear when I go to a certain screen, and I haven't been able to figure out how to fix it. I haven't seen it on my desktop in my office, but in my laptop... Which procedure do you want to go to the detail on? Just pick one off your table. What's a good one to look at?

MR. MARSCHKE: A good one to look at is Finding Number 2.

MR. HINNEFELD: Okay, Finding 2, I got it. I got it.

MR. MARSCHKE: It basically shows that SC&A, in the finding it shows that SC&A has an action item. It says SC&A did not identify a particular documents or references. So I put in here on the table, I said SC&A should identify particular documents and references. So really all the stuff that's in red on this table was drawn from the comments that are in the database.

MS. MUNN: The only question in my mind is whether you're now tracking that adequately the way we're trying to track the outstanding issues on this database. Is that going to come up for us when Nancy sorts it, for example? I guess it will.

MR. HINNEFELD: Well, I mean, he's just paraphrasing what's on the details page of the database. So if we answer the details page on the databases appropriately, that should take care of that. Wouldn't hurt to keep it in mind I should say.

DR. MAURO: We're almost like learning how to walk.

MS. MUNN: Yes.

DR. MAURO: In other words if we just got a new bicycle, great bicycle, but we don't know how to ride the bicycle yet. So what we're really doing now is -- I want to step back just a moment. What we're doing now is we realize we just made a judgment. The judgment was the things we're going to talk about today are the things that SC&A and NIOSH exchanged information on over the past month. In other words from this global thing that's out there,

we decided that we're going to zero in right now is some very specific things that for whatever reason, was the subject of some exchange, and we've reached some, what we believe at least, some degree of resolution, closure or whatever, status. So in effect that's what we want to do. By way of protocol is that what we're going to do in the future? That is, for all future work group meetings, is it our intention that the way we're going to come out of this perhaps after we go over the big picture, the status report as Nancy sort of summarized, then we zero in on what new has occurred from the last work group meeting to this one and go over the exchanges.

MR. HINNEFELD: I would think because the exchanges would be in here.

DR. MAURO: And the exchanges will be loaded.

MR. HINNEFELD: They'll be loaded in the database so we'll both have time to address them. Or there may be just one entry like we may go away, and it's our turn for a response. And so that might be a response you guys, you know, we would get in days ahead of time. You

can read it. If it's suitable, we can come here and be done. Or if not, you may want to provide, you might say we'll be providing something additional. I mean, it would be, I would think, something like that.

DR. MAURO: I guess I'm really asking a question. Is that how our modus operandi is going to be?

MS. MUNN: And that's one of the big concerns for the work group right now is, all right, now that we have this marvelous tool, exactly how are we going to use it in the future? What's our process going to be inside the working group using this new tool?

And if we, a concern, for example, is will the first agenda item be in the future here or are all open items? Are we going to continue prioritizing? I actually left some space for us to talk about this at considerable length this afternoon, and perhaps we may need to visit it more than once. Because exactly what our process is going to be, given that it changes everything, it's an important thing for us to decide upon.

DR. MAURO: We just jumped into a process

just now.

MS. MUNN: Exactly.

DR. MAURO: Do we want to do that? Is that what we want to do?

MS. MUNN: And who's going to select which of those items we're going to be jumping into? How do we do that each time? In the past we've tried to prioritize what we were going to look at based on a number of issues that were outstanding at the time. Then attempted to follow up on those items while still addressing continually, upcoming new issues. We used our matrix and an action item list to do that in the past. Is our action item list going to be an open item list from this set of procedures every meeting that we have?

DR. MAURO: I just saw a weakness in our bicycle. When we have a conversation like this, what we usually talk about when we hit an issue, the model was this. We're on an issue -- and this is the way the old matrix used to work -- and there would be an action item. And right in the matrix we would write an action item. And the idea being, okay, we put it in the balance of this stack of paper.

What I'm hearing now is maybe that's not going to serve. What we really need is for each meeting as a standalone, here are the list of action items. Because right now the way in which we designed this thing, the action items are embedded in each of these issues that are sort of --

MS. MUNN: Yes, they are in all three sets.

DR. MAURO: -- and what would seem to serve us better is building this thing, it really would serve us better, that is, there are a series of action items that are going to come out of this meeting. And it would be nice if they're all in one place and not dispersed, embedded in each separate item in the matrix.

MS. MUNN: Correct.

DR. MAURO: So right now we have not developed, I mean, I think we could agree that's probably a useful thing to have. For each meeting there's going to be a set of action items, which are cross-cutting. That is, whatever the action items are, there's a list of ten, and they may affect five, six, seven different procedures. If that stood alone somewhere and became the kick off to

this meeting --

MR. MARSCHKE: We should be able to do that. That's a relational database is what you're looking for. That's a relational database, and that's the way it should be set up. It shouldn't be a problem in being able to do that. Sort the action items not only by procedure or findings that they are associated with, but also the meeting dates that they are associated with. That should not be a problem.

The one thing that bothers me though on this particular finding is here we had a directive to revise the OTIB. And what I think should be done to this particular field is I think we should put in here that NIOSH did revise the OTIB on such-and-such a date, and then we should put it in there.

And then we should put in here that SC&A reviewed the revised procedure and found whatever comments that we had in this table here, we did not agree that it basically corrected the findings. And we should put that in there and the date associated with the third set should be -- so actually, these

fields down here should be filled in. And now we're talking about now we will put in another, the second record on 5/20/2008, where we are back from discussing this finding a second time.

MS. MUNN: So that's what we're looking for.

DR. MAURO: What I hear -- and I agree with you're saying that -- is that if we're really being dutiful to the model that we're building in our head right now, SC&A and NIOSH should have populated this document with that information and brought it to the table so that it would already be there. And then when we get into the discussion section that becomes the next date of this work group meeting and our discussions regarding it building on how we're going to move forward. And I agree, that's the way it should be --

MR. MARSCHKE: Yeah, that's the way --

DR. MAURO: And we didn't do that.

MR. MARSCHKE: We didn't do that, and the reason we didn't do it is we didn't have the database when we were writing the third set of findings. But when we go back, we should take, we should look at the third set, or

actually, the second set also because both of those, the revised second set, I believe also had some re-reviews in them. And so any time we do a re-review, we should basically indicate in the database that that was re-reviewed and the finding was either we agree with what was done or we disagreed with what was done.

MS. MUNN: This is a major concern, this change-over period right here. You specifically did not get an action item list from the Chair for this meeting, which you've had in the past. The simple reason for that is human frailty. I couldn't find my notes in the file from the meeting where I identified what action items were supposed to be in front of us for this meeting. Moving from that list to relying on being able to pull that information out of the database is, I think, a valid concern.

If we're going to use the database as our action item profile for each of our individual meetings, then we need that data certainly several days in advance of each meeting itself. And the question of how we

assure that that database gets filled in from the preceding activities that have occurred is a question that is still unresolved in my mind. It's not clear how this is going to work.

And it would perhaps benefit us to not try to resolve it this instant sitting around the table since we do have a specific item for the afternoon. We've devoted an hour's time for the possibility of discussing pretty much this same activity here. It would be helpful for us to think about it a little bit between now and then and revisit this.

Do we all understand what the issue is as I perceive it?

DR. ZIEMER (by Telephone): Let me comment on that, Wanda. Number one, if you have a list of action items, it's a little difficult until we know that they've been completed for you to even schedule, for example, a next work group meeting unless you know that they've been attended to.

MS. MUNN: Yes.

DR. ZIEMER (by Telephone): So somehow we need feedback in between from the NIOSH and

the contractor, maybe to the Chair, that specific items, I mean, you can have a tentative agenda, which makes use of those action items, but you need feedback that they've actually been addressed otherwise there's no point in meeting.

MS. MUNN: We do, indeed. My concern is that we don't, I don't believe our current process gives us that list of action items walking out of this meeting that I have been doing administratively in the past. That's my concern.

MR. MARSCHKE: I don't think we would get it walking out. We won't get a list of action items, an automated list of action items, walking out of this meeting, but walking into the meeting next time, we should be able to have that automated list and some point in time before the next meeting, whoever's running the database can provide to Wanda the status of those action items.

What I would take is any action item that is specific for a finding, we will take, and we will implement, and we will add that to the database as something that is a directive

down here. And as John just said, we will then, if we don't have already, we will then add the capability to sort by meeting date, working group meeting dates.

And we will get all these working group directives that are associated with that meeting date and anything else that is associated with them, any NIOSH follow ups or any SC&A follow ups associated with it. Is that what you're looking for, Wanda?

MS. MUNN: That's pretty much what I'm thinking at this moment. Let's do not try to resolve it right here this issue, this moment, but let's do think about it over the time that we have between now and this afternoon. And let's try to resolve that question specifically.

DR. ZIEMER (by Telephone): Well, let me put another item into the thought process here. It would seem to me that you could easily have an action item that you're going to carry forward for a longer period of time that you wouldn't necessarily deal with at the subsequent meeting simply because either NIOSH or SC&A cannot complete that part of the work.

The item is then identified. Maybe it's a white paper or something. You have maybe an estimated date that it's going to be completed, and you can carry that forward for a longer period of time. I don't think we need a guarantee that every action item identified is going to be completed or addressed at the next work group meeting.

MS. MUNN: We know that's not going to happen.

DR. ZIEMER (by Telephone): But at least you want to have some action items. You're not going to have a meeting with no action items ready for discussion.

MS. MUNN: Correct.

MR. MARSCHKE: I'm sorry. What I meant to say is we will give you a status of what the action items are and those that have been closed will be statused as closed. And those that are being worked will be continued to be carried forward to the following meeting.

DR. ZIEMER (by Telephone): Wanda or Stu, could I ask a specific question on this OTIB-0002 where Stu says there are 11 findings, three of which are closed, eight of which are

in abeyance. We think all 11 should be closed. Do you have that item there? Is that the one you were looking at?

MR. HINNEFELD: Yeah, that's the one we were looking at most recently.

DR. ZIEMER (by Telephone): Now, my question is when you say they're closed because they are re-evaluated under Supplement 3, it seems to me that doesn't guarantee that the issue's been closed.

MR. HINNEFELD: Right.

DR. ZIEMER (by Telephone): It's sort of moved out of the first set of cases, but it could still be an open item. Isn't that correct?

MR. HINNEFELD: I think that's true. It probably depends on what was said in the re-review about the, I mean, if the re-review says these earlier findings weren't closed, and that's all it says, then you need to keep your earlier findings open and close them based on the earlier review.

DR. ZIEMER (by Telephone): Well, I'm talking about the eight that are listed as in abeyance.

MR. HINNEFELD: Right.

DR. ZIEMER: And I guess the argument is since they've been now in a sense moved into the second or third group of procedures for review and have been reviewed later, that we don't have to worry about them under this report. It seems to me if they're not yet closed, even if they're in a different round now, that we shouldn't show them as closed. Do you know what I'm saying?

MR. MARSCHKE: I think that's probably --

MR. HINNEFELD: Yeah, that's what Steve said in his response to me.

DR. ZIEMER (by Telephone): Okay, that's what --

MR. HINNEFELD: And I said I agreed with that.

DR. ZIEMER (by Telephone): That's what you were implying, the same kind of thing then.

MR. HINNEFELD: Yes, yes.

MR. MARSCHKE: We agree with you, Paul.

DR. ZIEMER (by Telephone): So later on when it was -- and I don't know that you'd want to necessarily go back into the first report and put all the iterations in that first report.

It could just stay there as in abeyance until it was actually closed in the later one. And then you refer to the later report, and you would have all the other iterations in there, right? It sounded like you were wanting to put all the iterations back in the first report.

MR. MARSCHKE: I don't think we're going to, are we doing reports or are we just going to put it --

DR. ZIEMER (by Telephone): Well, I don't mean --

MR. MARSCHKE: -- in the database.

DR. ZIEMER (by Telephone): The first database.

MR. MARSCHKE: We want to track all the changes in the database so that we have a history of how this came about.

DR. ZIEMER (by Telephone): Yeah, but once you say that it's in abeyance because it's been moved to the third database, for example, then it seems to me a person could go to the third database and get the status there. You don't have to transfer that additional information back to the first database. Just

think about that as a possibility. It's going to show up in two places, right?

MS. MUNN: Is this not a transport item? Isn't this --

MR. HINNEFELD: No.

MR. MARSCHKE: No.

MR. HINNEFELD: I think it depends upon how the findings for the second review are phrased. If the findings in the second review essentially parrot the finding in the first review and say this was done earlier and isn't resolved, and it is listed there as a finding in that second review, well then, you could close the earlier one because you've carried it forward into this second finding. You can close it there.

If it's not phrased that way, if the second report just says some of the original findings we don't think were closed by this revision, it just says that, then you still need to keep them open back on the first review so that you can go back and find out the original finding and close the original finding. So it depends upon how they're specifically stated.

I have the summary statements of the findings here, but I haven't for right now gone back and try to compare and give a judgment on do I think this is just a repeat of the one from the earlier review. I haven't done that yet. I mean, we can go out here and do that and maybe make some recommendations based on that.

Because our recommendation to say it was closed was just we revised, our action was we were going to revise the OTIB and revised it. That's where that recommendation came from. What Steve has correctly pointed out was, well, but the re-review indicated that that revision didn't close all those findings. It didn't necessarily close all those findings.

MS. THOMAS: If I can just add something here. It was confusing when I was looking at some of these items. There were several scenarios. One was that a document, we would either revise the document or create a new document like Procedure 4, 5 and 17. Those findings got closed and moved to Procedure 90. And then like for OTIB-0002 there was another

rev. which I guess we kind of view as a different document than rev. 1 and re-review that. It might be simpler to make sure that initial findings with the rev., like rev. 1 in this case, get moved to rev. 2. Then you can close out everything for rev. 1. And then there were cases where you reviewed the second rev. or another rev. And then there were cases where you hadn't yet like in Procedure 90. And it was hard to follow with just these handful of statuses, you know, was there consistency --

MR. MARSCHKE: We haven't been totally consistent. We haven't been, as we should be in how we are transferring things --

MS. THOMAS: Yes.

MR. MARSCHKE: -- and how we are handling the database. Nobody has really sat down and really figured out a set of working procedures on this is how the database is supposed to be worked.

MS. THOMAS: What I'm suggesting is that maybe we decide that first and then just maybe decide how we're going to --

MR. MARSCHKE: Close out, once a new rev.

comes out, we're going to close out all the old ones and create new ones or whether we're just going to keep the old ones open until they're closed? I mean, we can do it either way. It's just preference as to how you want to do it.

MS. MUNN: This is all a part of our learning curve including the issue of language. How we are going to word the findings that are put into the database will be key if we are, in fact, going to rely on that wording to move us forward. The preference would appear to be closure in the example that we were just citing. Closure of the first revision, but assurance that the issues that were being transferred are properly transferred in totality so that you have open items correctly open but items which may have been agreed to and resolved be not carried forth.

DR. MAURO: You see, to me it's, we have an archive. We just want to be clear to the next generation of people that take this over because there will be different people going through the system whether it's from NIOSH or

at SC&A, and when they go in here, if there's an item that's closed, and the reason it was closed is because for all intents and purposes it's being handled by another procedure review, that should be stated in the text.

In other words there'll be a little box that says closed. And they want to see, okay, how was it -- that's the whole purpose of this archive. Okay, it was closed. There are a lot of reasons why something could be closed.

MS. MUNN: Was it resolved and agreed to or was it transferred? Was it exported?

DR. MAURO: And I think that's a decision that we simply have to make around this table. How do we want to do that? And then we just do it that way. But we make sure we make it clear in the archive what it is we did.

DR. ANIGSTEIN: I have a question for Steve.

Steve, can you put a little comment in it the way you do in Excel? It has a comment in a cell so that -- doesn't work?

MS. MUNN: Speak up, Bob, so the --

DR. ANIGSTEIN: I was just suggesting, can you insert a comment into a box? Because I'm

not familiar with this. And Steve just said, no, you can't.

DR. MAURO: It's almost as if it could be very forgiving. What I'm getting at is let's say there's a degree of inconsistency in how we call things. But as long as we're not ambiguous in our rationale and justification in the box below, in other words let's say for some reason someone calls it a transfer but someone else could have called it closed, let's say that happens.

But as long as both people in the text that goes along with it say this is what we did. We called it closed because of this or we called it transferred because of this. It's almost very forgiving then. And if we do, if there is a degree of, we like to eliminate inconsistency, but we can live with a little bit of inconsistency as long as our archive is complete and explain what we did and why we did it I think we get away with it.

MS. MUNN: And as long as the transferred items are transferred appropriately.

DR. MAURO: Oh, absolutely.

MS. MUNN: Which is why language is so

important in how we approach this.

MR. MARSCHKE: But to come back to the example of set one PROC-0004, -0005 and 0017, they were not transferred to PROC-0090 by putting transferred in the status box. They were basically closed and new ones were really opened, and if you look at the findings associated with PROC-0004 in the first set, I don’t know, in the status box you will see closed. You won’t see transferred. So again, it’s just, but the information is there. I don’t know what it says down in the detail box why it was closed. This was closed because it was transferred to PROC-0090? Hopefully, it does. And so really, like John says, it’s kind of a wash. It’s maybe not done consistently, but the information is there.

MS. MUNN: Well, we need to strive for as much consistency as we can get. So --

MR. GRIFFON (by Telephone): And, Wanda, I think the other place it’s probably fairly important is we have a draft letter for the first status report to the Secretary, and you’re saying x number are closed. I think they may interpret that a certain way. We

better be clear in our language if we're going to submit a report to the Secretary.

MS. MUNN: Well, the report itself is pretty specific about that. This cover letter is very vague for a very, what I thought was a good reason. That is --

MR. GRIFFON (by Telephone): But just those items we just talked about, I know all those findings from the earlier CATI procedures that were transferred to 90, I assume they're listed as closed. And I didn't sort in my mind, view those as closed. They were transferred --

MS. MUNN: Yes.

MR. GRIFFON (by Telephone): But they're tabulated as closed I believe in your statistics.

MS. THOMAS: They're closed for Procedure 4, 5 and 17, but they're open for Procedure 90.

MR. MARSCHKE: On your cover letter they're included in the 99 that you have identified as being closed.

DR. MAURO: This is your choice. This is really your choice. That is, it's a definition issue. And I think what Mark

pointed out is a good point. We don't want to be misleading to -- it may appear when you're saying closed is that, oh, we've accomplished something. But in fact we really haven't accomplished too much because what we really did is move it out of here and put it over there. We still have to deal with that issue.

So I mean, if your objective in the letter is to communicate accomplishment, things that have actually technically accomplished, calling it closed might be a little misleading but from that perspective. From our perspective it's just the archive and what we call it. I mean, it could go either way, but I could see why you'd want to -- in that context it's probably a good idea to make it clear that it was transferred out so that a person doesn't think we actually solved this problem.

MS. THOMAS: Again, if I could add a comment. From --

MR. GRIFFON (by Telephone): I guess, this is, John, I'd just add on to what John was saying. I guess I was reading closed as resolved, and I'm not sure that letter might

lead people to believe that.

DR. MAURO: I'm starting to lean toward the transferred concept more than the closed concept. I think closed should be clean. This issue itself, wherever it's sitting, wherever it's sitting, is not closed --

MS. MUNN: Then it's over.

DR. MAURO: -- then it is closed. It's a cleaner way to go.

MS. THOMAS: From our perspective the most used, the example of Procedure 4, 5 and 17, those documents don't exist anymore so to have open findings for documents that have been canceled and no longer used seems a little strange so the transferred might be better.

MR. GRIFFON (by Telephone): Well, I'm not sure that's strange because those procedures, if you look back at old dose reconstructions, they're still applicable.

DR. MAURO: That's true, too. That's a good point.

MS. THOMAS: That's true.

MR. HINNEFELD: Well, this is sort of an odd-ball case. In fact, not only have these, these closed cases have been, I mean, if the

number of closed is over-counted, but the total number of findings is over-counted as well. Because these procedures, these same 29 findings appear twice. They're closed one time, and they're open another time. So we've actually could count the total findings as 29 too high. And the 29 too high is in the closed column.

MR. GRIFFON (by Telephone): Yeah, and I thought about that, too, Stu. I think you're right. Yeah, that's another factor.

MS. MUNN: Well, as the King of Siam would say, it's a puzzlement.

MR. HINNEFELD: Is it one of the things you want us to think about until this afternoon?

MS. MUNN: It's really something we need to think about and try to resolve this afternoon. We certainly do not want to fall into the trap of misleading anyone, least of all the Secretary. And we want to be crystal clear in what we transmit. So let's do give some very serious consideration to exactly what we're going to use in terminology and how we are going to report that. We'll take that up this afternoon when we get to the discussion on

open and open-in progress. We'll add to that the transferred and import-export issue and hopefully wrestle all that to the ground this afternoon.

Continuing on through the list of items that we were looking at, it appears to me OTIB-0001 has no disagreement with the items that are listed there. Six and 14 are closed and others are in abeyance, correct?

MR. MARSCHKE: Yes.

MR. HINNEFELD: Yeah.

MS. MUNN: And on IG-0002, five, eight and nine --

MR. HINNEFELD: We agree with Steve's response. Eight and nine are closed and five should remain in abeyance. Isn't that what it says?

MR. MARSCHKE: Yes. So based on this I should take it as an action item from the working group to go into the database and make these six findings changed to closed?

MR. HINNEFELD: That's my understanding.

MS. MUNN: Yes. That's correct. Five is still in abeyance. Yes, that is the directive unless I hear to the contrary.

DR. ZIEMER (by Telephone): So this is on IG-0002?

MS. MUNN: IG-0002, yes.

DR. ZIEMER (by Telephone): So ten items in abeyance, but three of them -- okay, you're saying that five remains in abeyance?

MS. MUNN: Five remains in abeyance and --

DR. ZIEMER (by Telephone): Eight and nine are closed.

MS. MUNN: -- eight and nine are closed.

MR. GRIFFON (by Telephone): See, this is where I would say the work group concluded that no action was necessary on eight and nine. I would almost categorize that as resolved rather than closed. Because I still, you know, that's I guess our other discussion.

MS. MUNN: Well, resolution --

MR. HINNEFELD: It's not as bad as Mound.

MS. MUNN: No, resolution leads to closure. And that means we're not going to look at it again.

MR. MARSCHKE: Right.

MS. MUNN: And so that's what we deem to be closure, final resolution regardless of what that resolution is.

MR. GRIFFON (by Telephone): Okay, but all these other ones that were closed were actually transferred to different procedures.

MS. MUNN: Yes.

MR. HINNEFELD: Well, just the ones we talked about today. I mean, there are a lot --

DR. ZIEMER (by Telephone): You're going to mark those as such, not as closed then.

MS. MUNN: Yes, the ones that were transferred to other procedures we're going to attempt to see that the language, I hope that it will be our attempt to see that the language indicates where they were transferred. And we're going to debate this afternoon the issue of how, what specific language will be used for this shorthand version of reporting that. Okay?

DR. ZIEMER (by Telephone): Yeah.

MS. MUNN: I think we've covered the material that we've needed to cover here. I hesitate to undertake any of the other items that we have on the agenda since all of them are going to be significant and time consuming I do believe. Is there any objection to our

leaving for lunch ten minutes early?

DR. ZIEMER (by Telephone): Just a question on the afternoon agenda. So you're going to begin then with TIB-6001? Is that right?

MS. MUNN: With TBD-6001 and the resolution matrix for Appendix BB.

Bob?

DR. ANIGSTEIN: Did you mean, are you sure you mean 6001 and not 6000?

MS. MUNN: I mean 6000, sorry.

DR. MAURO: And my question, Wanda, this is John. Will you expect to actually start the discussion on the findings in 6000 or do you want to just zero right in on Appendix BB? Two different subjects. I mean, you know one is a subset of the other. Appendix BB stands alone.

MS. MUNN: That's the one that is of most significance right now that is outstanding, and we have the matrix and the findings in hand to address. So it's my intent to have you touch on what TBD-6000 is and then go directly into our issue with Appendix BB and the matrix unless someone has objection to that.

DR. ZIEMER (by Telephone): Just in preparation, do we have the date of the version of the matrix you're going to use?

MS. MUNN: Yes, hold on. I believe there was only one. Did we have more than one version of that matrix?

DR. MAURO: Just that one.

DR. ANIGSTEIN: I think there are two matrices. There is a matrix for 6000, and then there is a matrix for Appendix BB.

MS. MUNN: The matrix for Appendix BB was the one that I anticipated would be addressed.

DR. ANIGSTEIN: That was done --

MR. MARSCHKE: May 2nd was the date on it. Is this what you're talking about?

DR. ANIGSTEIN: Is that the matrix?

MR. MARSCHKE: It's a resolution. That's what it says on the title.

DR. MAURO: This is 6001.

DR. ANIGSTEIN: This is -- that was a misprint. I see where the problem came in. That was a typo.

MS. MUNN: So it is 6000?

DR. ANIGSTEIN: Yes, this should read 6000.

DR. BRANCHE: So Wanda's agenda should read

TBD-6000, and your document should read TBD-6000?

DR. ANIGSTEIN: That is correct.

MS. MUNN: And the date on it is May 2nd, 2008.

DR. ANIGSTEIN: I believe that's correct.

MR. PRESLEY: Who sent it?

MS. MUNN: And it was sent --

MR. GRIFFON (by Telephone): I have an e-mail from Nancy Johnson on that date, May 2nd, Paul, if you're looking for it.

DR. ZIEMER (by Telephone): Okay, yeah. Thank you.

MS. MUNN: All right, very good. It is now 11:40, and so we're only five minutes off schedule. We will adjourn until 1:00 p.m.

DR. BRANCHE: One p.m.

MS. MUNN: Correct.

DR. BRANCHE: We will hang up and call again at 1:00 p.m. eastern daylight time.

(Whereupon, the working group adjourned for lunch.)

DR. BRANCHE: We're continuing now with the after-lunch portion of the Procedures work group, and Ms. Munn, it's all yours.

TBD-6000/6001 AND RESOLUTION MATRIX FOR APP BB

MS. MUNN: The first item on the agenda this afternoon is TBD-6000, and it's associated TBD-6001. We're going to be focusing this afternoon on Appendix BB to TBD-6000. But before we do that if John Mauro would be good enough to give us a very brief reminder about the content of 6000 and 6001, we'll start from there and --

DR. ZIEMER (by Telephone): Before he does, John Mauro, what is the correct title of your report? Is it TBD-6001, Appendix BB or -6000?

DR. MAURO: Six thousand, it's a typo on the cover page.

DR. ZIEMER (by Telephone): So the cover page is wrong.

DR. MAURO: Correct. Correct, the cover page is wrong.

DR. ZIEMER (by Telephone): Okay, and that title carries throughout the tops of all the pages in the report.

MS. MUNN: That is correct.

DR. MAURO: We'll fix it.

DR. ZIEMER (by Telephone): Yeah, got you, thank you.

MS. MUNN: Go ahead, John.

DR. MAURO: I will begin. This is by way really of introduction. There are two, I would say, important documents that came out dealing with uranium facilities that are what I would call generic TBDs or site profiles or exposure matrices. One is called TBD-6000. One is called TBD-6001.

Six thousand effectively is a generic exposure matrix or technique for doing dose reconstruction for workers at AWE facilities that handled uranium and not, didn't process it, but basically machined it, drilled it, extruded it, cut it, and as a result were exposed to airborne uranium dust, thorium dust -- well, I don't believe the thorium section's been done yet. It's held in reserve.

So it's a generic approach for reconstructing the exposures, basically inhalation, ingestion and external exposures to workers that were up close and personal to uranium metal and including recycled uranium. And we performed a review of that document which was published on September 14th, 2007.

It contains seven findings. Three of

those findings are basically generic and are being dealt with in other venues. But four of them, specifically findings one through four, are unique to TBD-6000, and I would assume at some appropriate time we'll go through those four. The other three the way I see it are really being dealt with in other venues and should be appropriately transferred or referred to these other venues.

But the first four are unique to TBD-6000, and basically they deal with the dataset. In effect on TBD-6000 what was done is there's a large dataset of generic literature characterizing the airborne uranium dust loading throughout the 1940s and '50s from facilities that were handling uranium.

And from that dataset was constructed an exposure matrix to say, okay, let's use that dataset and apply it to all other facilities where we have people that handled uranium, but they didn't take any air samples or didn't take very many air samples, did not take urine samples, did not have film badge data, and we're going to use that as surrogate.

So TBD-6000 is important for two reasons. One on its own right. That is, taking the data on face value do we believe that is claimant favorable and scientifically valid as a surrogate for all those site profiles or facilities where there really isn't very good or very much worker-specific data. So it becomes a surrogate data question that I think is going to have to be eventually addressed.

In a similar way TBD-6001 deals with a generic description of uranium processing facilities. These are primarily facilities that did wet chemistry. They received uranium ore and as a result digested it, separated it out the uranium, processed the uranium. They had the residue and raffinates, a much more complex situation.

But similar to 6000, it is a generic analysis of the kinds of exposures people experienced at these kinds of facilities and built, based on the dataset from many facilities where data were then available, came up with an exposure matrix that would be used to apply to other uranium processing

facilities where wet chemistry was done when they did not have any data.

Again, it's a surrogate data issue, and we have to look at it not only from the scientific perspective, was the dataset that they used fairly representative of the cross-section of activities? Did NIOSH pick an upper end as a reasonable upper bound surrogate?

And finally, there are the four big questions, the surrogate questions, that Dr. Melius put out in his draft that we need to ask ourselves. Does it meet the first criteria, the second criteria? So these are subjects that I believe we'll be dealing with around this table at some time in the future.

But today there's one particular aspect of TBD-6000 that we're going to get into in a little bit more detail, and that is TBD-6000 has, which is a generic exposure matrix for uranium handling, it has a whole series of appendices. I believe 15 and maybe even more. Appendices which give some very specific guidance for specific facilities.

For example, the TBD-6000 is generic

and universal, but there are some facilities that had some very unique aspects to them where you would supplement TBD-6000 with some unique aspect. And that's what these appendices are for.

For example, Appendix BB for 6000 specifically deals with General Steel Industries, which is a uranium handling facility where TBD-6000 applies. But because it is something very, very unique, namely it used a Betatron to do nondestructive testing of uranium slabs. Something that was unique to a few facilities, and specifically General Steel.

And so by way of introduction, we were asked to take a real close look at Appendix BB and the exposure matrix assumptions, models and so forth that were used in Appendix BB as an approach for dealing with reconstructing doses to workers at General Steel Industries.

And Bob Anigstein prepared that report. The report has been delivered in both in a PA-cleared version. There is a matrix that was distributed, and that's been PA cleared. And Bob actually has a slide or a

briefing that he's going to go through which also has been PA cleared.

So I just let you know that anyone who might be on the phone who might be interested in getting copies of the matrix, report or the briefing, all of that has been PA cleared and is available for distribution to anyone who might want a copy.

MS. MUNN: That being said, Bob, do you want to take us through Appendix BB?

DR. ANIGSTEIN: In 1901, the Commonwealth Steel Company was founded in Granite City, Illinois, and it was a foundry. Instead of making steel plates, they made steel castings. In 1929, General Steel Castings, which had been just organized, acquired the Commonwealth Steel, and they also built a new facility in Eddystone, Pennsylvania, basically duplicate facilities doing similar work.

During the Korean War, they got a contract with the U.S. Army to make armor plate for tanks. I believe they made, they actually cast the tank turrets and the tank hulls. In order to be able to inspect this armor to make sure there were no defects in it

which you wouldn't want to have in an army tank, the Army built, brought from Allis-Chalmers, two Betatrons. And they built the structures housing these, one at Granite City and the other one in Eddystone.

So my first slide is this is a view of what then became --

DR. BRANCHE: For the people on the phone here, the presenter at this point --

Mark, can you hear him?

MR. GRIFFON (by Telephone): Yeah, I can hear him.

DR. BRANCHE: Well, right now they're just making some adjustments, so he's not in presentation mode. I just want to make sure.

MR. GRIFFON (by Telephone): Yeah, I could hear him before.

DR. BRANCHE: Okay, thank you, Mark.

DR. ANIGSTEIN: So the top view, this is an aerial view of the facility just to give you an idea. It's a very extensive facility, probably sometime in the 1960s. And what happened there was they had, each of the facilities had a Betatron. Then in somewhere around -- and that date is in dispute, our

opinion in 1952 -- the Mallinckrodt Chemical Works was producing uranium ingots to be rolled into fuel rods for Hanford. And they wanted to make sure that, just like the Army didn’t want defects in their tanks, they didn’t want defects in their fuel rods.

So someone had the idea, hey, right across the river thirty miles away we’ve got this facility and they had a Betatron going through the Army, so they contracted them to start doing radiographs of slices of the uranium. And this is written up in the Mallinckrodt TBD that there were, Betatron slices were cut from the uranium ingots and there’s no other description of them, but we did get good descriptions from the workers.

And these were slices up to, the ingots were up to eight inches in diameter so that would be the maximum size of the slice. The slices can’t be any more than four inches because you simply cannot ^rod thicker than four inches of uranium, so we just used the maximum. Probably they were thinner. Then in 1963, General Steel, which by this time was called General Steel Castings, by this time it

changed its name to General Steel Industries because they acquired other things besides casting plants, shut down their Eddystone facility.

And then GSI, as it's called, moved the Betatron, the Army-owned Betatron, from Eddystone, Pennsylvania to Granite City. And so here you can see. This is the old Betatron building. It's called old because it was built first. The Betatron itself is not older actually, the other one was slightly older by a few months. So it was built you see well away from the other buildings. However -- that was built by the Army Corps of Engineers.

However, when it came time to build another building for the new Betatron, and the Betatron is only new in the sense that it was new to this location, they built it right against, this is called Number 10 Finishing Building. So it goes in this order, this is Number 10, next to it is number nine, eight and so forth. And the idea for it was they wanted to minimize the transfer time.

Again, the main purpose of these was to radiograph steel both for the Army and some

for commercial users also. I believe they made reactor vessels for nuclear reactors. And they got the idea that if you build it right next to the Finishing Building, there's a railroad track that goes into it, you simply cut down your turnaround time, speed up production.

And also, not only speed up production, but the purpose of doing or radiographing the steel was to look for defects. If they found a defect, then it went back into the Finishing Building and it would be chipped and grinded. I think of it as a dentist filling a cavity in a tooth. First, he has to clean it, you know, cut away some more tooth surface then he fills it. So that's pretty much what they did.

They would hollow out a cavity wherever the defect was and then fill it in with the good metal. And they wanted for the casting to stay warm because then you didn't have to heat it up again. So again, the less transfer time the more efficient the operation.

However, it does cause a problem by

having it in that location. Given then that they were under contract to Mallinckrodt which was basically a subcontract under Mallinckrodt's contract to the AEC, then any radiation exposure that the workers received, even though it was not connected with uranium is compensable. I mean it comes into their, into the dose reconstruction because this is radiation they received while on the job and some of the work included the uranium radiography.

For those who are unfamiliar as I was until a few months ago, this is the guts of a Betatron. Simply, this tube is about from here to here. It's about 18 inches. This is actually a medical Betatron. The only difference between the medical and the commercial is that it has an extra port so you can get the electron beam directly out with the commercial.

But basically, this is both the injector and the target. The electrons go in, and they're inside a large electromagnet. They go in circles and make many, many, many turns, and each time they get accelerated.

And eventually, they get up to the top energy, which was 25 MeV, and at this point they're deflected slightly. They hit a platinum target and generate X-rays. So it's just like a conventional X-ray machine only much higher power.

And here are the actual Allis-Chalmer Betatron at GSI. It was a photograph I think taken by one of the workers and furnished to us. And this is in a standby position. The beam would be directed this way. So once they finished marking up this casting and indicating where they want to take the radiograph, this swivels 90 degrees or however many degrees it needs to and is directed at the casting. And the film, if you hit this case, the film would go inside and gets exposed.

DR. MAURO: On that picture, where did the X-rays come out of?

DR. ANIGSTEIN: It's not in operating --

DR. MAURO: Where would it come out?

DR. ANIGSTEIN: This way. On this picture it would come out this way. So you have to swivel it, swivel it to get it.

So here are the principal sources of radiation exposure which I will go through. The first is the external exposure to direct penetrating radiation, which means photon exposure from the Betatron itself. And that has some points. There is straight radiation during Betatron operation. This is something that goes through or around or reflected from around the shielding. Obviously, nobody's in the room or supposed to be in the room while the Betatron is on.

However, when you turn off the Betatron, the donut, some parts of the donut, we're not quite sure which, become radioactive for a very brief time. But immediately after shutdown, they were measured at 15 MR per hour at a distance of six feet from the target. So that's a second source. If anybody approaches it very shortly after the machine is turned off -- and the workers were under instructions to waste no time whatsoever -- they would get some radiation exposure.

And then finally, the high energy X-rays can actually activate, they react with the nuclei of the atoms in the metal, and they

can make them radioactive. So --

DR. ZIEMER (by Telephone): Which target is that 16 MR per hour reading?

DR. ANIGSTEIN: Say again?

DR. ZIEMER (by Telephone): You gave the 16 MR per hour --

DR. ANIGSTEIN: Fifteen --

DR. ZIEMER (by Telephone): -- value. Is that --

DR. ANIGSTEIN: One-five.

DR. ZIEMER (by Telephone): -- the target or is that --

DR. ANIGSTEIN: That is at a distance of six feet from the Betatron target.

DR. ZIEMER (by Telephone): Six feet, okay, thank you.

DR. ANIGSTEIN: Right, that’s what was reported to us.

MR. MARSCHKE: And it was 15 rem, Paul.

MR. HINNEFELD: MR, millirem.

MR. MARSCHKE: Fifteen MR, I’m sorry.

DR. ANIGSTEIN: Milliroentgen per hour.

MS. MUNN: And how far inside that apparatus that we saw is the target actually located? I mean, my point is --

DR. ANIGSTEIN: About, about -- excuse me?

MS. MUNN: -- is there three feet between the target and the collimated field?

DR. ANIGSTEIN: Less than that, less than that. Probably maybe about 18 inches. I think maybe more like 50 centimeters if I remember correctly. The model was about 50, so slightly less than two feet.

MS. MUNN: So if you're talking six feet from the target itself --

DR. ANIGSTEIN: It would be about four feet.

MS. MUNN: -- it would have to be within approximately four feet of the actual collimated beam?

DR. ANIGSTEIN: That's right. That's right.

Then in addition to the direct penetrating radiation, there is beta radiation from the activated metal. Then in addition, they also did some radiography with Cobalt-60. They had about an 80 curie source -- I don't know how old that 80 curie source was. Maybe that's when it was bought. Anyway, that's the way it was spoken about -- that they used, and the primary use for that was they would have a round casting like a nuclear reactor vessel.

And to use the Betatron they would have to shoot many times from different directions or they could simply put the source in the center, essentially wallpaper it from the outside with film and leave it for as many hours as it took. And then you could get 30 exposures all at once.

So they did that occasionally. It was done occasionally, and that took place in the same shooting room where the Betatron was. Obviously, one or the other. They wouldn't both operate at the same time.

Then there was internal exposure potential. We have to consider intakes of activated metal dust and intakes of uranium oxide. The uranium, of course, was not machined, but it just flakes off when you handle it.

Here is a diagram of the, what's called again the new Betatron building, the one that was built second. This comes from one of the FUSRAP reports. So this is a diagram. And here is the same one translated into a model for the MCNP code. It's like the orientation is different. So there were

probably many possible orientations. We considered an orientation which was occasionally, ten, 15 percent of the time, where again, either because the casting was very heavy or just for expediency, there was a railroad track that goes right up and down here.

Sometimes they would shoot the casting on the railroad track and not remove it. And then they would bring the Betatron into this position, and they had to do some trickery to override the limit switches which supposedly don’t permit that, but nevertheless it was done. And when that happens you have, even though the beam is primarily goes forward, it’s not collimated in the sense of having shielding all around it to make sure it goes straight. It’s just the nature, a very, very high energy Betatron electron beam, that burns shallow and goes forward but not a hundred percent. It’s still goes off to the side. And if we notice, this area was not shielded, at least that’s what it indicates on this report.

Here you see you have this shield wall

so there's two walls of concrete with sand in between. And then it looks like there's more concrete here. And then here just a thin line so I call it unshielded. We don't know what it really was. And so I modeled it as simply an open area.

And once you do that we can get a line of sight from the Betatrons out to here. And, in fact, our model, I found out that there was a restroom. Number 10 Finishing Building is here. And they built a little tin shed adjoining the building which these workers used as well as workers from the other buildings. And they could be getting the exposure from this sort of, scatter beam, just the fringes of the beam could reach there, plus the scattered radiation from the steel itself. So you had that.

You had here was described as a break area. And workers confirmed this was where they sometimes took breaks. And the only thing that separated the break area from the main thing was just a thin, maybe eight-inch thick steel door, 16th inch probably, which at those energies essentially is transparent to

radiation.

So here was another source of radiation. The operators were fairly well shielded. They would be behind this wall, and even if they happened to be near the door, which is just again thin steel, there would be some scattered radiation but not very intense.

That's another view of the same, a cross-sectional view.

MS. MUNN: Bob, I had a question when I first saw this diagram. We were talking about the steel casing being on the railcar, right?

DR. ANIGSTEIN: Some of the time.

MS. MUNN: And I had a couple questions. One is do we have any indication of how frequently that would happen? That would appear to be a very infrequent event.

DR. ANIGSTEIN: No, I think I was told maybe ten percent of the time.

MS. MUNN: Okay, now looking at this diagram, it appears to me that the only way a railcar could get into this would be to come through the break area.

DR. ANIGSTEIN: Yeah, yeah, there was a railroad track that passed right through.

See? Here you see the railroad track. They didn't bother indicating, yeah, the railroad track goes right through. When I say a railroad track, it's just a narrow gauge, and these are self-propelled electric cars.

MS. MUNN: Understand. So the break area was not the kind of break area that we think of ordinarily now where there would be tables and chairs and --

DR. ANIGSTEIN: No, I don't think so.

MS. MUNN: No, it's just --

DR. ANIGSTEIN: Well, there was a time clock. The time clock was here. They would have to punch in and out for the Betatron workers. They would come in here, the way they described it, there would be a time clock here. There was a door on this side, and then from there they would go in here and the office area and go to the control room.

There was no restriction on -- the main thing was there was no radiological control. There was radiological control here. There were interlocks. If one of these doors opened, they would turn off the Betatron or maybe it was interlocked; there would be a red

light, warning horn, Betatron is on, clear out of this room. So there's very little possibility that anybody was in that room during the shooting.

However, there was no radiological control outside. Now what I learned later after I wrote the report, and I had gotten, I misunderstood some. There was a fence, a low chain-link fence all the way around, and that was separated, that was ten feet away from the wall. So you can think of that as a security fence even though it was only about this high, but still if someone wants to climb over it, they're really looking for trouble.

So I had originally listed two other possible exposure locations. That's probably unrealistic. There probably was not easy access to that. But there was access here, and there was certainly access to the restroom and here in the building. So there were locations where workers were not warned away.

Furthermore, there's two locations on the roof. One worker testified that he would go up on the roof to service the ventilators. And I said did you communicate with the

Betatron operator to make sure the Betatron isn't running. No, he would access it on the outside of the roof of another building, and the operator didn't know there was anybody up on that roof. So there would be a very high dose rate up there.

MS. MUNN: Before we move the break area, I'm envisioning the break area as just a large shed over the railroad --

DR. ANIGSTEIN: Correct.

MS. MUNN: -- that goes in, with timecards and things of that sort on the wall. And when you say ribbon door.

DR. ANIGSTEIN: Yeah, it was just like a garage door. It was made of steel, steel slats.

MS. MUNN: So it's an elevating rather than --

DR. ANIGSTEIN: Right, correct.

MS. MUNN: -- side-to-side.

DR. ANIGSTEIN: An overhead door.

MS. MUNN: Okay, an overhead door.

DR. ANIGSTEIN: And they did say that because the door didn't always come completely down, they would even put sandbags to close

off the little open area underneath. But at the initial -- I even saw a photograph of this steel door taken in recent year, and the steel itself has no radiation protection from high energy photons. So putting those sandbags there was just not done by somebody who had knowledge about radiation protection.

MS. MUNN: Right, but we are talking about almost exclusively scattered.

DR. ANIGSTEIN: Well, no, not actually. Because if the Betatron was in this position, the Betatron would be a tube itself. It’s not shielded. It’s not collimated. It simply sits inside this magnet, but if the tube magnet has a come down from either end, and the tube itself, a good portion of it is in the open. And therefore, according to our computer simulations, we actually did the complete thing where we actually irradiated -- in the computer model -- we actually irradiated a platinum target. Certainly, the strongest component of the beam goes forward, but there is no absolute cut-off when it goes through the side. At least that was my conclusion by looking at the values that it

was not just scattered. It actually was some of the primary beam, the fringes of the primary beam, the number, if you will, of the primary beam, was up here. And the dose rates I list here. If this thing is on the railroad track, and you're in the control room maybe just waiting to get out for the next shot just like one meter inside the steel door, dose rate of 2.6 MR per hour, which is not highly dangerous, and we have to consider that it's not on all the time. I calculated it has about 41 percent duty cycle because most of the time it's setting up for the next shot. However, in the break area if somebody happened to be just inside the door, you have 24 MR per hour. Here at this location in the 10 Building, 8.6 and then in the restroom, because it was more, at a smaller angle, it was closer to the perpendicular to the direction of the beam than the others, it was 22. So the break area was nearer but it was further. It was almost at a 90 degree angle. So here at this corner of the restroom it was ^. And we're told also that some of the workers would hide out in the restroom.

MR. PRESLEY: How far away was the restroom?

DR. ANIGSTEIN: Well, this is the scale here, so this is ten feet. I mean I can't tell you right at this moment. That's sort of estimated.

MR. PRESLEY: So we're looking at least eight feet.

DR. ANIGSTEIN: Yeah, correct.

So, and then on the roof at the time, just above the steel castings. The exposure rate was 208 MR per hour, and I think if I had moved it, the location a little directly over the Betatron instead of directly over casting it might even have been higher, not by a huge amount.

So then we go on to the activated, exposure to the Betatron apparatus. This is during the set-up time. While they're adjusting the ^ from the Betatron, marking up the locations on the casting, and again, according to the workers, for the heavy castings, the thick ones, they would give, I think they were over six inches thicker, over six inches of steel in all the uranium slices, they would be casting for six feet from the

internal Betatron target.

They actually had a string that was marked six feet and nine feet. Mistakenly, I thought at first that meant from the outside of the apparatus. No, it was already, was attached to the outside of the apparatus, but the string was calibrated from the internal Betatron target.

So if the casting is six feet away, the worker can’t be six feet away. He could be nearer, could be in between. One worker will be on the other side, and one worker would be on the Betatron side. So just figure it could be between three and six feet, and we just calculated like he was going back and forth uniformly and integrated over the exposure over that distance.

Sorry, this is if they were nine feet away. Some of the shots were nine, forgive me. Some of the thinner metal was shot at a distance of nine feet. So figure, the worker obviously got inside the metal three to six feet. Then if the metal was six feet, then he would be at three feet. That’s just sort of approximations that we made.

So this is one point of this agreement we have with the NIOSH analysis which assumed that the worker's always at six feet, or at least they use that, the measured value at six feet to assign the radiation exposure to the Betatron operator during the set up. Also, by interviewing workers we found we got a little better idea of the actual time and motion. And that would be the 90 percent of the shots, not 90 percent of the time. It was 64 percent of the time they were what we called short shots.

And a typical short shot would be three minutes of exposure, 11 minutes of set-up time, one minute going back and forth to the control room. So they would spend a lot more time in the Betatron room than was assumed in the NIOSH analysis. Then the other ten percent, which is 36 percent of the time because they're longer. Obviously, they take longer. There would be the six foot metal-to-target distance and the operator was at three feet.

Of course, the exposure time increases the closer you are. So the exposures, the

bottom line is our assessment of the exposure to the Betatron apparatus is that we get 34, 35 MR for the eight-hour shift if they're only doing short shots and about 13 MR per hour for an eight-hour shift if they're only doing long shots as opposed to the NIOSH estimate which is 3.2 MR for an eight-hour shift. They didn't report ^ they 0.81 per shot when each shot was two hours.

So that's two kinds of disagreement. One is the duration, and the other one is the location of the worker.

MS. MUNN: In your discussion with the workers, was the indication that once the shot was complete, the Betatron was left in its position. It was not -- for example, the photograph that we just saw. The Betatron was in the position that one normally sees safe operation for, that is to say pointing downward --

DR. ANIGSTEIN: I hear you.

MS. MUNN: -- and normally when it was operating, it probably would be, as you indicated earlier, at a 90 degree angle rather than pointing down. So in your conversations

with the worker was it their memory that it was left in position for activity and at the end of the shot it was not returned to its what we would think of as safe downward position?

DR. ANIGSTEIN: If they were bringing in a new casting, they would probably be moving the Betatron out of the way. You don't want to have a collision between the Betatron and the casting. But one casting might require many shots, might require a hundred shots, might require 30 shots. And they would simply move from one, typically, the largest X-ray film available is 14-by-17 inches. It's commonly used today like a chest film.

So they would simply set up the shot here, then run to the control room, fire, wait until it's over, come back, move it over eight, 12 inches, 14 inches. They would allow about a three-inch overlap between the shots and go back so it wouldn't make any sense for them to be swiveling it out of the way. They would just be translating it back and forth, up and down in between those many shots.

MR. PRESLEY: Didn't the Betatron have a

window that was closed on it after the shot was taken?

DR. ANIGSTEIN: No, there was no window on the industrial Betatrons. There was no shield and no window.

MR. PRESLEY: What about, how long did the 15 MR, how long did that last?

DR. ANIGSTEIN: Well, according to the person who took the measurements, Jack Scheutz, who worked for the Allis-Chalmers Company and then was actually contracted by NIOSH to write a report on his work, he said when I interviewed him that 15 minutes was essentially zero. So we kind of said you can’t really, in the kind of exponential decay you can’t deal with zero. So I said maybe 15 microR because the background is about ten normally. So he said, yeah, that sounds reasonable.

So we calculated assuming that it goes down by a factor of a thousand in 15 minutes. So the exposure is really only during the first few minutes. After that it doesn’t really matter whether you’re in there 15 minutes or two hours because there’ll be very

little additional --

MR. PRESLEY: When you talked to these people, did they tell that they went in just immediately after the shot --

DR. ANIGSTEIN: Yes, absolutely. They said basically there was a ^ over their heads and the whole thing was maximum turnaround time. Because until they finished all the radiographs, they couldn’t send the casting back to the plant to be repaired, and they were repaired and radiographed again.

And the trigger was for each casting they ship out it goes on the books as a shipped casting and you get a bonus. So the workers, they want to get that little extra pay for each, get like a commission. I don’t know who got the commission, but there was some pay incentive to get them out quickly.

MR. PRESLEY: Did anybody talk about how that they repaired those castings?

DR. ANIGSTEIN: Yeah, yeah, they would repair them I guess with hammers and chisels, chipping them away with some kind of electrical power grinder, also with a torch, burning it away. They would burn the metal

away. They had three different mechanisms. The called it chipping, grinding and burning. And then the welder would come in and put, you know, bring in fresh metal.

So either a burning torch or a welding torch, it might have even been one and the same but with a different adjustment of the flame at any rate. So they were there. They were very close. They were working probably in a cloud of dust from the metal. However, as it happens -- well, I'll get to that. Let me just do that in a minute because that's my next; I don't want to jump ahead here.

So the next thing we had to look at was the radiation from the irradiated steel because the steel then becomes radioactive. A complex -- I didn't put it up here, but it's in the report. It's a complex curve because it has short-lived nuclides. It has a whole bunch of radionuclides. Some of them are very short-lived, some of them are longer. So immediately after the shot the short-lived ones predominate, and later on you get the long ones.

But what NIOSH did was simply, they

just assumed that all the activation was Iron-53, which would be true if it was pure iron. But in reality they were doing many alloys. We just picked HY-80 as a representative alloy from ^. And this has a fair amount of manganese and other alloy and elements in it. And so we also had the advantage of a very recently released code which did that precisely. So it’s still not a huge effect.

So their estimate would be 0.21 per shift. Our estimate, considering all the different types of exposure, the long shots, the short shots and using the same assumptions that NIOSH used, which we had no reason to disagree with. The worker would spend part of the time one foot from the metal. Part of the time one meter from the metal. So we came out with a little over twice as much. Still, these are not very high numbers.

Then the next thing was when they did the uranium, and they would use uranium slices. They would typically, they would do four shots. You had this maximum 18-inch disc, and the film is only 14 inches wide. You can’t get the whole disc, and also they

like overlaps. So they would do as many as four shots.

So using that model, so that's how we did it. However, they used an earlier version of the code, not that it was a problem, but they had to do it in several steps. And Sam Glover, who did the calculations, was kind enough to share his input files with me. And I shared them in turn with my colleague, Richard Ulsher, who recently retired from Los Alamos, who's an expert on this.

And there was a mistake in his input file. And as a result the exposure from the uranium was very much overstated. So our calculation shows that per shift it's 6.8 millirem with 86.8 per shift assuming four shots per shift in the NIOSH calculation. So there is a compensating effect there.

And this is just a roll up of all the external exposures. So I'm not ^ just in red I marked what is really the salient fact.

DR. BRANCHE: Bob, would you speak up a little bit, please?

DR. ANIGSTEIN: I'm sorry.

DR. BRANCHE: And actually, if the people on

the phone could please make sure your phone is on mute. Sorry about that.

DR. ANIGSTEIN: I guess I'm turning to the -- maybe what I'll do is I'll simply look at my screen here, then I can face the microphone.

MS. MUNN: Great.

DR. BRANCHE: I think that would help.

DR. ANIGSTEIN: So basically for each type of scenario you have three components. Those they get in the control room while the Betatron is on and were simply monitoring the controls. The dose that you get from the metal during the set up.

And the dose that you get from the radioactive donut. And you see that was by far predominates. For the steel shots it predominates. For the uranium shots the metal becomes more radioactive so it becomes comparable to the others but still smaller.

And this is the wrap up, and it turns out that the steel, radiographing the steel is actually giving slightly greater exposure than if they only radiographed uranium. So therefore, the issue of how much uranium was really done at any given time really fades

away. The two are very close.

And then there's also the old -- I told you there was a new machine and the old one, and there was a slight difference in the power, and also it was further away. The ^ was a little different. The power was a little less so they get a little less exposure from that one.

Annual exposures, one thing, one big difference is the workers consulting among themselves in their different impressions agreed that 65 hours a week was a reasonable time. One of them said I always worked three extra shifts. I mean, there were five plus three so that would be 64 hours, so 64, 65. Some of them said we worked as much as 80, but we agreed that 65 would be a reasonable consensus estimate.

So this comes out to 406 shifts a year. And based on the exposure to the new Betatron, they would get 13.6 R Roentgens per year. And also they got a neutron dose which was not calculated by NIOSH. And the Betatron, while it's running, gives off neutrons. Not in its post, you know, when

it’s dying down there are no neutrons that we know of.

But there were definitely neutrons coming out from that target just like X-rays coming out from it. So they would get, the neutron dose is small compared to the photon dose, but still it’s there. Then also we directly calculated using the MCNP Code the dose to the beta radiation from the residual radioactivity, the residual radionuclides. And from the uranium is by far the most significant because you get a couple of short, not from the fission ^ from the activations. You get a couple of short-lived uranium isotopes because U-239 and U-237, which are strong beta emitters. They don’t stick around very long. ^ is minutes ^ is hours.

So the basic summary which I think is the bottom line is that for the years our estimate with external exposure is essentially twice the estimate of NIOSH. And the two countervailing factors is they have less exposure from the Betatron, but they have exposure from the uranium which is overstated. So from ’52 to ’61 to ’62 the difference is a

factor of two. Then from ’63 on, they’re still doing, there’s less uranium, but they’re still doing the steel.

So they’re still getting the same amount of radiation exposure, whereas according to NIOSH because they’re doing less uranium, they get much less. So now we have a ratio, we have a difference between the two analyses ^ ratio a factor of two to a factor of six. Again, the neutron dose was episodic count for the skin dose. Again, we have higher, somewhat higher, not markedly so except in the final years.

Then according to the NIOSH analysis the Cobalt-60 radiography was unimportant because it was bounded by the Betatron. And we found that’s not always the case. Because we got information from one of the workers who was actually in charge of doing that radiography with that 80 curies source.

And he gave me a description which we put into the model, and yet by far if there should be somebody -- and again, it’s probably not a common occurrence -- but if somebody should have been on the roof at the time that

this 80 curies cobalt source was wide open, and even though it was inside the steel casting but it would be open on top, he'd be getting very, very high radiation exposure, over 900 milliroentgens per hour.

Then furthermore, they also had a small source. You had an 80 curie source. You had 150 millicurie, ^ source so that must be much less important. But that was not in a shielded area. That was just in the plant. They had a little cinder-block structure, whole cinder block, that was almost transparent to that radiation.

So anyone hanging around outside could get significant doses, up to 17 MR per hour. Have no information as to how often it was used, who were the people there. They didn't even, the people I talked to were not the ones who did that. So they had seen the building, that little structure.

Then to answer Bob Presley's question about the repair on it. So they would have the grinding, chipping, burning and then welding of the activated steel; it happens, and I'm surprised at the results, there is

very, very little radiation dose. And the reason is these are short-lived radionuclides.

And the internal dose from any radionuclide, the ^ nuclide, is when they stick around in the body for years. Radium, you know, never leaves the body for instance. You can die and the radium is still in your bones. These simply don't give very much dose even though there is some activity. There's enough activity there that they give external dose. But once you take it in, it goes away very quickly.

So NIOSH, we agree with, we concur with NIOSH. They said it was less than one millirem per year. We actually calculated it was less than a tenth of a millirem per year. So it's just not an issue.

The uranium dust we calculated simply the radioactive contribution, but the induced radioactivity in the uranium. And it's completely insignificant compared to the activity of the uranium itself. Whether you inhale the uranium dust from an ingot that's been irradiated or from one before it's irradiated, there's no difference in dose.

The difference is like on the order of one part in a million.

However, we took exception, and that's in our review of TBD-6000, but that's where they got their uranium dust intakes from. We take exception with the way the resuspension was calculated. We think that the uranium concentration in the air during the handling of the uranium was a reasonable claimant favorable estimate. But the amount that was in between those fairly infrequent operations we think was understated. And I'm not going to go into that because that's described by 6000.

MS. MUNN: We'll get into that when we get into our matrix.

DR. ANIGSTEIN: Yeah, okay.

And then finally, we disagree, we have a question about the covered period. And NIOSH assumed, and I guess the DOL assumed, that the covered period started through January '53 because there was a, during one of the correspondence at DOE during the FUSREP authorization, they simply casually referred to, oh yes, there were uranium operations

starting in the 1950s, from 1953 on.

However, there is a memo -- and I'll show that on this screen. So this seemed to be based, so this was this, in the material that was passed out to us from NIOSH and the DOE is this memo. And it clearly indicates that uranium ingots had been -- I call it an ingot. I think it was slices of ingots -- had been furnished to General Steel Casting it was then called, for a Betatron. And up here, very clear, if you look at the typewritten date, it looks to be 1953.

Now someone had hand-corrected it and made it a two. And it seems entirely plausible that the typist had made a mistake. Maybe she was thinking '53 is coming up already and typed and somebody went back and corrected it to '52. So if this memo was written in December '52, that means that this process was already going on.

And the plausibility of that assumption is... The Betatron was installed in January '52. We know that because there's actually a clipping from the local Granite City newspaper and that was probably a

publicity handout from the company saying we now have this Betatron. It was dated in January. It was already up and running or in the process of being turned on.

And so it was put in by the Army, and here it was Mallinckrodt across the river already producing the uranium ingots. It would seem reasonable they would take advantage of this. They wouldn't necessarily take a year to, before they, they're going to do it, they're going to do it right away. That just seems plausible.

Again, there's no proof. But that and the memo makes us think that the claimant favorable assumption would be say that this operation, in fact, started in January of '52, and use that year as covered employment in case there should be any claimants who were working there that year.

So that's, and then the conclusions finally are that the external exposures that we estimate are higher than those by NIOSH and particularly so in later years. From '61 to '66 year-by-year we go higher because we're still using the steel, whereas NIOSH took by

accident having overestimated exposures from the uranium, came up with high numbers, relatively high numbers at the beginning.

But then when they correctly assume that the uranium radiography was going down because we have, for years from 1958 on we have purchase orders saying how the dollar amount that allowed, that GSI was allowed to charge Mallinckrodt and how much per hour they could charge.

Divide one by the other and you get how many hours exposure. And that steadily goes down year by year so even by a six-month period. But the steel does not go down, just the opposite. Any they're doing more steel but they weren't doing uranium.

And as a matter of fact the contract had an oddity in it. Maybe because they didn't want to be charged for shift work, they specifically said that the uranium radiography should be done Monday through Friday between seven to five or eight to five or something like that.

So if you want to say what about the worker doing the steel, well, that could be

worked in an evening shift, the night shift. They ran three shifts, three shifts and at least six days a year, six days a week. So those workers who would still get some exposure to the uranium -- anyway, that's how we made this estimate.

So we said that the skin we believe was higher, somewhat higher. The uranium dust intakes we believe may have been higher. The dose rates from the exposure to Cobalt-60 should be considered and the date. So that's essentially a very brief summary of my 90-page report.

MS. MUNN: Thank you, Bob. That I think, hopefully, gives us all a better feel of what we're going to be looking at when we start to look at the matrix now.

To begin with the matrix we've all had it in hand. I don't know how many of us have had an opportunity to absorb what's in it. Since they are SC&A's findings --

DR. ANIGSTEIN: Excuse me. I can put that on the screen if you like. Would that be of any help?

MS. MUNN: Does everyone here have their

hard copy?

I think everyone here has a hard copy. Hopefully, the folks on the telephone have their electronic copy.

These are SC&A's findings so I'll leave it to SC&A to present them to us one at a time, and we can make our own decisions as to whether or not NIOSH wants to discuss those with them here or whether we're going to need a technical call to do that at another time.

John or Bob, whichever of you is --

DR. ANIGSTEIN: I wrote these so basically I simply cribbed from the executive summary of the report.

DR. ZIEMER (by Telephone): Wanda, could I ask a question before we get into the matrix?

MS. MUNN: Certainly, Paul.

DR. ZIEMER (by Telephone): This is just a piece of information. I may have missed it in the written SC&A report, but did the start date for the use of the 80 curie source go back to '53 as well? Did you establish a start date on that source?

DR. ANIGSTEIN: No, the worker I interviewed started around '61 or something like that. He

did not know. I asked him when was the source purchased, and he did not know. I was not able to --

DR. ZIEMER (by Telephone): So it was already there though in ’61 at least.

DR. ANIGSTEIN: I think it was ’61. It was the early ‘60s. I’m just going by memory now. I have my notes.

DR. ZIEMER (by Telephone): And do we have an end date on that source? Was it used, was there any point at which it was returned or did it continue to be there throughout the whole period in question?

DR. ANIGSTEIN: No, it belonged to GSI so --

DR. ZIEMER (by Telephone): It remained there during the whole period.

DR. ANIGSTEIN: Yes, that is correct.

So these are basically criticisms of the report not all of which -- well, directly or indirectly they would affect the dose reconstruction, the dose assessment. So the first one is completeness of data sources. There was some just findings that the report was incomplete.

This is something that some of the

claimants who, advocates for the claimants, they criticize the reports. And that was they keep talking about one Betatron. In fact, there were two Betatrons, which is true from 1963 through 1966 -- sorry, basically ’65, January of ’64 the second Betatron was installed. So that is correct. This is an omission which makes the report, the NIOSH report, incomplete is the best way of putting it.

Then again, issue two is the period of covered employment. I’ve already talked about that.

MS. MUNN: Before we go away from issue one, Stu, we haven’t asked NIOSH to look at these and to begin to pull together responses. Do you have any responses or any commentary that you want to throw out on the table as we’re going through these or would you prefer to wait for written response or how would --

MR. HINNEFELD: We are preparing responses so I’m not ready to talk about any today. I’ll just get it out of the way now and make one comment about the covered period. We’ll provide, we can provide the document to the

DOL to see if they want to change the covered period, but it's not within our authority to change the covered period outside what is designated as covered.

MS. MUNN: With each of these findings if you have any comment to make, please do as Bob has gone through them.

MR. HINNEFELD: All right. I doubt that I will. Like I said, we're working on preparing responses.

MS. MUNN: Fine, thank you.

DR. ANIGSTEIN: Issue three, the --

MS. MUNN: Well, did we do two?

DR. ANIGSTEIN: That's the period of covered, I basically covered that.

MS. MUNN: Yes.

DR. ANIGSTEIN: Issue three is they simply state that the Betatron beam intensity was 100 R per minute and that was simply an error. Because I actually read the report that was submitted to NIOSH by Mr. Scheutz formerly from the, I guess he is the successor to the Allis-Chalmer Company. He's the only person who continues to serve the Allis-Chalmer Betatrons, the three that still remain in

operation.

And there's actually a table, which is not shown here but was in the report, which he furnished, and I simply copied it and reduced it, which shows that the Betatron tubes, because the tubes were not made by Allis Chalmers. They were made by a company called Miklin that used to make X-ray tubes. And they would send them to Allis-Chalmer. And Allis-Chalmer would then test them before they would accept them.

And the acceptance criteria, the minimum, was 200 MR per hour. And the ones that he actually tested were closer to 300. So 100 may have been the very early ones but certainly not the ones of the time during when this second 25 MeV Betatron was operating. So as I said they go up to 282. So we decided based on information we got from the workers who remembered the manual, the instructions, the 250 MR per minute was much more likely to be an accurate, claimant favorable assumption.

DR. ZIEMER (by Telephone): Do we know how that was measured?

DR. ANIGSTEIN: Yes, we do. Allis-Chalmer

had a published procedure in their manual where they set up a Victorine ionization chamber at a distance of six feet just to make things a little more complicated.

DR. ZIEMER (by Telephone): So the reason I ask that question is because the definition of the Roentgen is dependent on electronic equilibrium, and you rarely have that at these high energies. I want to make sure, and I wondered if you had looked at that procedure. These could even be lower or too low.

DR. ANIGSTEIN: I did. It would take a standard Victorine ionization chamber, simple ionization chamber, and then they actually give an engineering drawing of a large Lucite, hollowed Lucite cylinder, that acts as a equilibration shield. It goes, the Victorine chamber goes inside a hole --

DR. ZIEMER (by Telephone): Inside an equilibrium --

DR. ANIGSTEIN: Right, exactly.

DR. ZIEMER (by Telephone): -- sleeve basically --

DR. ANIGSTEIN: Exactly. Now it is entirely correct that the Roentgen is not even defined

for energies above ten --

DR. ZIEMER (by Telephone): Ten MeV.

DR. ANIGSTEIN: Ten MeV. So this is sort of like an extrapolation of that concept. But anyway, whatever it was --

DR. ZIEMER (by Telephone): I want to make sure that they at least had those sleeves on it.

DR. ANIGSTEIN: Yes, they did have the sleeve, and they measured it at six feet, but they used a 25 Roentgen chamber and put it into a 100 Roentgen reader. So basically multiplied it by four to make up for that distance. This is their published procedure.

Finding number four is the stray radiation which we found could be very, very significant, and which according to Appendix BB, the maximum was 0.72 MR, millirems per hour. I don’t know what the model of the Betatron, that the Betatron building they used was or they counted for the open passageway, the lack of shielding in some of it. They did not give a description. I didn’t ask for it. I’m not saying they refused to give it. But it definitely was much higher.

But the significance of this, which I perhaps didn't emphasize in my slide talk is we have, we -- SC&A, we think we've got a pretty good handle on the exposures to the Betatron operator probably on the conservative side, the claimant favorable side. We know where he was. How much time he spent. We have four Betatron operators which he wrote us a memo after conferring with each other and said, yes, this is the best recollection of a typical operation.

However, the other locations where people other than the Betatron operators were just plant workers using the restroom, being outside, being in the break room. We have no idea of how much time they spent there; who they were. Whether they were the some ones. So there is radiation to a potentially significant radiation to other workers that we don't have a firm...

MS. MUNN: Was this restroom outside or inside the chain link fence that you mentioned?

DR. ANIGSTEIN: That restroom was directly accessible from inside this Number 10

Finishing Building. The chain link fence was around the Betatron Building that was sort of an appendage to this Number 10 Finishing Building. This long shed.

MS. MUNN: So it was accessible to the Number 10 Finishing Plant, but that would outside of the chain link fence.

DR. ANIGSTEIN: It was outside the chain link fence. The chain link fence that surrounded the Betatron Building, the way one of the people explained to me, the real purpose of it was, I think it was for security to keep people from going in and pilfering something. There would be a parking area. They didn’t want somebody robbing their car. And, of course, the concrete wall, they didn’t worry much about it. But at any rate, yeah, it was just, I don’t know if it was for radiation safety purposes or just security purposes, convenient.

But, yeah, the restroom they would go into the, so if the Betatron worker wanted to use the restroom, he would have to go through that rail tunnel, which was also the break area, go into the building and then walk a

little distance, and then go through the door.

And then later, even though we were not soliciting it, we would keep getting some additional, oh, by the way, I forgot to tell you sort of thing. And it pointed out that there was in this Number 10 Finishing Building, it was higher. It had a peaked roof, was a little bit higher than the Betatron Building.

And the thing about the Betatron Building is according to -- I mean, I just saw a photograph. I don’t have an elevation plan from General Steel Industries. I do have the horizontal, the layout. But the Allis-Chalmer manual gives detailed instructions how to build the building. They don’t build the buildings. They just furnish the Betatron, but they give you detailed drawings, and it seemed to me that they were followed.

So the building is about 37, 38 feet high but only the first 20 feet are shielded. After that it’s just metal or maybe a thin layer of concrete. Whereas, the higher part of the Number 10 Finishing Building is higher than 20 feet.

And it was pointed out they would have an overhead crane to be obviously as high as possible because you want to get it out of the way of the operations, which ran the length of this Number 10 Building, and the operator would ride on that crane.

So it’s conceivable, plausible that the operator if he had X-ray vision could have looked straight into the Betatron Building and over the shield wall. So that there could have been some exposure as he was going back and forth in addition to the workers who happened to be in that area where it was not shielded from the side.

So you had a lot of places where there were poorly shielded areas which, I guess, I don’t want to make a value judgment, but the first building that was built by the Army Corps seemed to take that into consideration. That is the nearest other building 250 feet away, and that’s already a storage building probably, not very well inhabited. Whereas, this building they deliberately built right close to their main operations for convenience.

Anyway, this radiation --

DR. ZIEMER (by Telephone): But those are still calculable from scatter calculations and distances surely.

DR. ANIGSTEIN: They certainly are except that -- and we did calculate some of them, except that we have no good sense of the, what workers, the duties of the workers which would place them in those locations.

DR. ZIEMER (by Telephone): Yeah.

DR. ANIGSTEIN: That’s where the problem is.

DR. ZIEMER (by Telephone): But I think you can bound the dose rates in those areas.

DR. ANIGSTEIN: Oh, yeah, sure, I mean, you can say they were there eight hours a day. That would be the maximum. In which case that would become then the limiting dose. It would be higher than the dose to the Betatron operators who were always in the control room reasonably well shielded during the, while the Betatron was on.

DR. ZIEMER (by Telephone): Well, I guess I wouldn’t assume that a priori because this is fairly common on industrial facilities where you have sky shine and scatter to other areas.

I mean, the percent of the main beam that scatters in any given direction is a very small fraction.

DR. ANIGSTEIN: No, I'm saying that in the -- I'm not sure I understood your comment. We calculated the doses, the dose rates in the control room. And these dose rates in these other areas can be ten times as high, a hundred times as high as the dose in the control room, the dose rate in the control room. For instance, the dose rate on the roof was 200 as opposed to the maximum rate of 2-point-something in the control room.

MS. MUNN: The angle of incidence into the Number 10 Building would have to be pretty steep if it is going above a 20-foot wall. And one would have to have some knowledge of how near to the end of the Number 10 Building the overhead crane rails actually extended.

DR. ANIGSTEIN: Oh, it went from end to end, and the Betatron Building was in the center of it, but near the middle of the Number 10 Building, and the crane went from end to end.

MS. MUNN: Yes, but you see what I mean about the angle of incidence being over the

20-foot wall would have to be --

DR. ANIGSTEIN: Well, I did not calculate that particular location because we can, but it would still be, I'm just saying this is just a --

MS. MUNN: It's one more thing to take into consideration.

DR. ANIGSTEIN: Yes, exactly.

DR. MAURO: So what I'm hearing from you Bob, you have the MR per hour, the question is we don't know how many hours per day, how many hours per year --

DR. ANIGSTEIN: Exactly.

DR. MAURO: -- and that's going to be important especially if the MR per hour at these other locations could be as much as ten times higher than let's say at some of the locations where the Betatron operators stayed.

DR. ANIGSTEIN: Exactly, that's the basic point.

Okay?

MS. MUNN: Yeah, I'm fine.

DR. ANIGSTEIN: And then the other issue, which again I talked about here, is the radiography, the Cobalt-60 sources can be

significant as much as 960 millirem per hour on the roof of the building if it so happened, again, this is infrequent because the worker who serviced the ventilators said he did that about twice a year and spent about half an hour.

Now if he happened to be up there while this 80 curie source was in use, he could get in that half hour 500 MR. Now I'm not saying that's very probable. That's a coincidence, but there is a potential there. Over the years it could have happened. And then in other locations again all of these places, the Betatron operator is probably the safe guy because here you could get 12-16 millirem per hour from that. I think that NIOSH should retract it. Some of that may have been from inside the chain link fence which I didn't know was there. From the 250 millicurie source you could have, I think, 17 millirem per hour outside that room where the source was in use.

DR. ZIEMER (by Telephone): On this source, were you able to confirm that they leak tested this on a regular basis? Do we know that?

DR. ANIGSTEIN: No information whatsoever on that. The only thing we know is that there was a news release showing that some of the workers, a portrait of the workers, and saying they have gotten, they were in isotope training. In other words they actually took an approved course so that they could be licensed by the AEC to be isotope operators. The Betatron was not controlled by the AEC so there was no licensing on that.

DR. ZIEMER (by Telephone): Right.

DR. ANIGSTEIN: But to be able to use the cobalt source, they had to be licensed so you had these people. So what that meant, whether they had, they had someone, and I spoke to him, was a radiation safety supervisor, but he did not seem very familiar with the source.

He used the source, but as far, he couldn’t even tell me what the decay activity was. I said when was it purchased? When was it calibrated so we know over the years what its strength was? He couldn’t tell me. He did not seem to take into account that cobalt has a five year half life. So I have no idea.

DR. ZIEMER (by Telephone): Normally, they’d

have to adjust their exposures for that I would think.

DR. ANIGSTEIN: Yes, they would, and they may have.

DR. ZIEMER (by Telephone): We don't know for sure that it was leak tested, although if this was under an AEC license, it almost surely had to be. I mean, that would have been a license requirement. The reason I asked that question was did anybody ever check that facility for cobalt contamination?

DR. ANIGSTEIN: I would guess only when the ORISE or Bechtel, when they did the clean up in 1987, I think initially was the first time they made an inspection, they would have checked for that. But now we're talking about the source that might have been 30 years old, 20, 30 years old, so even if there was any cobalt there would have been considerable decay. But, no, that was never, we have no information on that.

DR. ZIEMER (by Telephone): Sorry to get off the track there.

DR. ANIGSTEIN: No, no, no, that's a very good question. Thank you, that never occurred

to me.

Another issue six is they never, Appendix BB does not mention beta radiation from activated steel. We found that the irradiated steel gives about two rads to the most exposed workers, gives two rads per year to skin. Of course, the skin itself would get more dose from the penetrating radiation, but nevertheless it’s a factor. I think for completeness it should have been included.

Again, the activated Betatron apparatus I talked about extensively in my slide show so the main argument just to put it succinctly is that we think it could have, instead of using the 15 millirem per hour, milliroentgen per hour, that the Appendix BB used and they also assumed the decay rate that wasn’t constant by starting off with 15. It could have been as much as 60 if the person was three feet away instead of six feet away. We actually used a steeper decay curve so the integrated rate would have been not proportional, that’s high.

And then the work week, that’s self-evident, the workers were fairly confident

that they worked a lot of overtime. In fact one of the supervisors told them like anyone who's not getting enough overtime just come and see me because I've got plenty to give away. And one of the workers even commented during his group interview -- we talked about this in large amounts -- he said there were divorces, and they all seemed to agree with this.

MS. MUNN: It sounds as though almost everyone appeared to have worked certainly additional shifts routinely not just once in awhile.

DR. ANIGSTEIN: Oh, no, they said it was the norm, at least for these Betatron workers because this was, it was the bottleneck.

MR. MARSCHKE: This would be for like the Betatron workers not necessarily for people in the break room or the restrooms or --

DR. ANIGSTEIN: We don't know.

MR. MARSCHKE: Yeah, the general plant workers may or may not have had this 65 hours per week.

DR. ANIGSTEIN: They may have had enough of those workers. Just as an aside, there is a

trade-off if you're running any kind of an organization, and you're assigning overtime because on the one hand they get paid time and a half so they appear to be more expensive. On the other hand hiring new workers and having to pay their benefits, there's a trade-off. So they may have given it to everyone.

MS. MUNN: And there's also a trade-off in efficiency. Anyone who works in any plant knows that.

DR. ANIGSTEIN: Or any other job. That's true.

But because there were a limited number of trained Betatron operators they would be definitely running those, my guess is they probably ran them 18 shifts a week.

Next, oh, yeah, the steel work practice, that's a fairly firm about this finding that the way it's presented in Appendix BB was that each shot was as if it was a new casting. They said, well, they would come in with a brand new casting that had not been irradiated, not radioactive.

Then it would take about half an hour to set up the casting and the shot. And then

they would shoot for an hour. That seemed to be assumed that all the shots were an hour. Then they would take another half hour to take it down, remove the film and get it out of the room. And so they could only do four a day. And so most of the time the operators were spending in the control room, at least half their time. And they vehemently denied that. When they read the report they said absolutely that’s not the case.

The turnaround time was very fast, and it was not a new casting every time. One casting would require dozens of shots. So it may be true if they were bringing in a new casting. Get the old one up on the railcar, remove it, bring the new one in, yeah, that could take time, but that didn’t happen very often. Because the castings, you could only do 14-by-17 inches, and the castings were much larger than that. So that makes a difference in the work practice. It makes a big difference in the exposure.

Then number ten, what there was is Sam Glover shared the MCNP input file, and he did it a little differently than we did it, but it

was basically a reasonable approach for calculating the activation of the steel and then using another computer code, Origin II, which is part of the scale system, to get the, what is the spectrum of radionuclides resulting from uranium fission and then getting the radiation from the radionuclide.

But there is a place where you have to put in the atom density. It's in peculiar units. It's in atoms per barns centimeter.

MS. MUNN: I can relate to that.

DR. ANIGSTEIN: Anyway, the number for uranium should have been around 0.06, something like that, and it was erroneously entered as one. So you immediately get an error of a factor of 16. So that's our finding.

And then the scatter radiation that they say if they give the, they calculate the dose to the Betatron operators, and they assign that dose to any worker who handled that steel because of the residual activity, says we'll give that dose to any worker who handled steel within two hours of the time that it was radiographed.

And everyone else gets the 0.72 MR per hour because that's the most you get from this sky shine, find that there are many locations where the dose rate is much, much higher. So that workers, non-Betatron workers, are not, that's not claimant favorable to assign them 0.72 MR per hour.

The critique, issue 12, really concerns the critique of TBD-6000. But in brief our difference is that the concentration in the air while the uranium is being handled is based on one of the scenarios in 6000. We think that that's the reason it's claimant favorable. I think it was 198 going from memory now, 198 DPM per meter. However, they used that concentration and said, okay, you have 5 micron AMAD uranium particles. So they're in the air and they settle to the floor, and by calculating the settling velocity, you can calculate how much side of the contamination layer. And our comment is that the uranium oxide forms on the surface of the uranium, it flakes off, and it falls directly to the floor. It never becomes airborne. It doesn't contribute to that

measured airborne concentration. So on the floor there's a lot more when you calculate this way.

And then secondly, they use a resuspension factor of ten to the minus six, and that's probably a good resuspension factor for a very quiet facility like a decommissioned facility. Nobody's moving around, and there is maybe occasionally a draft. Here you have workers walking, if not running, across this floor, trucks coming in, wheeled vehicles. Some of this stuff comes in like the one big casting ^ car, was on a flatbed trailer, truck trailer, they come in. So there will be considerably more dust stirred up.

So we think that ten to the minus five, ten to the minus four would be a reasonable resuspension factor. So that there will be larger intakes in between the uranium operations and also during this residual period after the cessation of contract activities. That's our finding.

DR. MAURO: I'd like to add to that a little, those two issues related to

accumulation of residual radioactivity from deposition and the resuspension. Those are generic and global issues that NIOSH has already addressed, one aspect of it, namely, the ingestion part. And coming up, I think it was OTIB-0009?

MR. HINNEFELD: Sounds right.

DR. MAURO: About the resuspension factor question of ten to the minus six is still, it is a global issue that I believe is still under investigation on the...

I heard Jim say that at one of our meetings. So this last comment that, set of comments, related to uranium inhalation, certainly we can address them as part of this. But I believe that we're going to find that it's probably already actively being addressed in another venue.

DR. ANIGSTEIN: I think I'm a little concerned. You did mention ingestion which we specifically did not include ingestion in any comment on ingestion because we are understanding that was being addressed. But that does not address the inhalation.

DR. MAURO: That's correct. The build up of

residual radioactivity on surfaces is common to both the inhalation from resuspension and the ingestion.

DR. ZIEMER (by Telephone): This is Ziemer. Let me ask a question on that because you mention here that the larger, quote, flakes of uranium oxide falling. But before the resuspension of interest has got to be this stuff smaller than five microns I would think. How important is this other issue? I mean, when you're going to ten to the minus five or minus four, are you still referring to the smaller particles?

DR. MAURO: Yeah, you're not going to get, in general, resuspension the rule of thumb is if it's bigger than a hundred microns, it really is not going to come up. But now the question --

DR. ZIEMER (by Telephone): Now, this says ignores the larger particles. But what I'm asking is that sort of important?

DR. MAURO: It might be. We've been talking about this. The question is, okay, the particles flake off are various sizes, fall to the ground. And certainly, if they stay as

large particles the potential for resuspension is minimal. However, there's so much anthropomorphic activity, walking, grinding under foot, the vehicles --

DR. ANIGSTEIN: Anthropogenic.

DR. MAURO: What did I say?

DR. ANIGSTEIN: You meant to say anthropogenic.

DR. MAURO: What did I say, anthropomorphic?

DR. ANIGSTEIN: Right.

DR. MAURO: My apologies. So you're right. It's a tough question whether or not are those particles that flake off and fall to the ground that may be in larger quantities than would occur from the deposition going on.

DR. ZIEMER (by Telephone): I guess we can speculate as to whether they'd be ground up more of a ^-type effect, but has anyone looked at that study-wise? Are there, have you guys looked at the literature at all?

DR. MAURO: No, we took it from assume you have fine particles below 100 microns on surfaces. We have looked at resuspension factors. However, we have not, at least I haven't, -- and, Bob, you may have -- looked

at would you expect the uranium that flakes off and falls to become ground up. No, no.

DR. ANIGSTEIN: Just intuitively, if you're stomping over it in your work shoes, and you're driving trucks over it, you would think there might be some --

DR. ZIEMER (by Telephone): Well, you know, I guess I would have that same reaction although I, just for the sake of argument, I suppose one could argue that depending on what else is being used in there, stuff could also clump up and become less suspendable. I mean, like is there any grease around, you know what I'm saying? So a priori I don't want to assume one way or the other. That's why I asked if we had any studies where people have looked at this.

DR. MAURO: And I think it goes beyond that also. Remember the residual uranium on surfaces, the database that we have, really goes toward, in TBD-6000, goes toward uranium machining operations, places that were really hacking away on this uranium and really had a tremendous potential to generate large flakes falling on surfaces.

This operation wasn't like that. They were handling slabs, but I guess I'm picturing they weren't doing the kinds of things you do at a uranium machining operation.

MS. MUNN: Certainly not a machining operation.

DR. MAURO: So I would say on both accounts there are certainly offsetting factors, no doubt about it.

DR. ZIEMER (by Telephone): Okay, just wondered.

MS. MUNN: And ten to the sixth has been used widely in resuspension calculations previously --

DR. MAURO: Not for the --

MS. MUNN: -- but not for this type of, I recognize that.

That was issue 12, right? And there's one more.

DR. ANIGSTEIN: Okay, this is just a scientific nitpicking perhaps, but the units are not consistent in the Appendix. They talk millirem and milliroentgen are used sometimes interchangeably. In one place in the Appendix they refer to the sky shine as 0.72 millirem,

and in another place they refer to it as 0.72 milliroentgen. And the two units of, there's a difference of about ten or 15 percent.

And it's just scientifically not correct. I'm not saying it makes a huge difference in the construction. And in another place they refer to beta dose in Roentgens per units. Beta cannot be measured in Roentgens so it's just a scientific observation.

DR. MAURO: Normally, those kinds of comments we relegate to what we call observations. So it really doesn't make it to here.

MS. MUNN: That's fine, and it's something I'm sure NIOSH will want to address.

Stu, I don't want to put you on the spot here, but do we have any feel for when we might be getting NIOSH responses to these comments?

MR. HINNEFELD: I would think they'd be available by the next in-person Board meeting. That's a little more than a month away. I'd think they'd be available by then, but I really have to find out. The person who's

doing it is Dave Allen who does a lot of other stuff, too. So I hate to, you know, if I tell him to do this by that meeting, what does that do to the other things he's working on. And is this really one to do at the expense of those other things. I really need to go find that out, but I think that would be a reasonable guess.

MS. MUNN: There's really some concern with respect to when our next meeting needs to be. We have so much on our respective plates that it's, I had hoped that perhaps we might work toward incorporating the next meeting of this with the big Board meeting. But at this point it doesn't seem likely given what the agenda is probably shaping up to be for that three-day Board meeting. If we cannot put together our next session prior to that time, then it's hoped that we could be able to meet before very long following that.

DR. BRANCHE: Just to let you know, Wanda, I have tried to make provisions so that anticipating that you and there's one other that I suspect might need some time, you have time if you want to meet either the evening

before or the morning of the first day of the Board meeting because Mark is having his Subcommittee meeting completely separate from the Board meeting.

MS. MUNN: That would be helpful for us.

UNIDENTIFIED (by Telephone): Well, I'll come and listen.

MS. MUNN: Hello?

DR. BRANCHE: Who just said that?

MS. MUNN: I don't know, but if we did have the morning prior to --

DR. BRANCHE: The morning of the 24th.

MS. MUNN: Would it be possible for us to at least address some of this?

MR. HINNEFELD: I think we can address some things. You know, there's a lot of other things to address. There are open findings that we provided initial responses on that we've never talked about. So I mean there are a lot of things that could be talked about.

MS. MUNN: My concern is that those open items that we have not even touched on here today --

DR. BRANCHE: Excuse me, if you could please mute your phones. Thank you.

MS. MUNN: The problem is that we have that list of what would have been action items normally for this meeting, which we have not touched on with any depth at all with the exception of the items that you and Steve discussed in your e-mail. So we do have a number of outstanding items that are not on our agenda today.

After our break let’s resume this discussion because we need to come to some conclusion about how we as a working group can prioritize the outstanding issues that we have not talked about today in concert with what we have talked about today and how long it’s going to take us to address those when our next meeting is going to be.

I don’t think this agenda is going to be really easy for us to come to real agreement dealing with everyone’s realistic expectations and schedules. Then tentatively I will hope that you and Dave will be able to at least have some initial response for most of the items that we have here in Appendix BB.

MR. HINNEFELD: I would think so. I would think we can do it by then, but like I said

again, it depends on everything else that is being done.

MS. MUNN: Let's do take advantage of the morning of the 24th.

DR. BRANCHE: How long do you think you'll want?

MS. MUNN: We'll take the entire morning. We won't be meeting for an hour or so. We'll take the entire morning.

DR. BRANCHE: Like 8:30 until about 11:30?

MS. MUNN: Eight thirty until 11:30 at least. Probably 8:30 -- when does our afternoon session begin?

DR. BRANCHE: I'm either going to begin it at one or 1:30.

DR. ZIEMER (by Telephone): You may have some overlap with some other group that wants to meet that morning.

DR. BRANCHE: Yeah, I haven't let everybody know that this provision is there. I had to wait until I heard more about what NIOSH was, I mean, I just finished the Federal Register announcement draft, and so once I did that I realized how much, I don't want to say too much flexibility, but I have some flexibility

so we don't have to start the morning of the 24th.

MS. MUNN: That's good because we can really use the morning.

DR. BRANCHE: And I didn't alter things because we're going, many people indicated they wished to go visit the Mallinckrodt site, and so there's the opportunity for sort of a late afternoon-early evening for people who want to have meetings then. And then I would say if you put dibs, since you're putting dibs now, that we might have some competing meetings.

We have to be careful of that though because there's only one of me, and I think there's only one other person who I have available who can be a DFO, and Dr. Wade is not going to be in the country even. So I've got Chia-Chia Chang who can do it. And also, we only have one recorder. So I have, we've got to be able to have some balance here.

So, Paul, I don't think we're going to have too many competing meetings. It just might be that we have to snip and parse. We might have to snip and parse here and there.

MR. STEPHAN (by Telephone): Hey, Wanda, this is Robert Stephan with Senator Obama.

MS. MUNN: Hello, Robert.

MR. STEPHAN (by Telephone): How are you?

MS. MUNN: I'm fine. How are you?

MR. STEPHAN (by Telephone): Good. I don't want to interrupt here. Just wanted to let you know I was on the call and whenever you get a moment, I just have a quick comment.

MS. MUNN: We do appreciate that, and your comment would be happy to be received right now.

MR. STEPHAN (by Telephone): Thank you. I want to just throw out there that I think we're heading towards a need for an 83-14 on this issue. I certainly appreciate what SC&A has done. Matter of fact I believe it was Senator Obama who requested this report awhile back. SC&A has provided our office with a briefing. Wanda was on that call. We had a very good call.

The direction that we seem to be heading in is there are so many unknowns. And I'm just very fearful that we're going to -- we need to debate this trying to find every

answer to every unknown, which will be very timely. And as you know we have always had a problem with timeliness. I don't, I think that, not be afraid to say that we don't know. Let's move on.

In particular, I realize this is not Steve's fault. He doesn't have a written report in front of him; therefore, I'm sure he doesn't want to comment too much on his response without a written report. But I'm really concerned that we're not going to report in enough time by our June Board meeting, which is in St. Louis. And we requested it be in St. Louis so the GSI workers could come.

It seems like we're going to yet again have a meeting where we're really not ready to vote, and that is very, very troubling to me. So I'm very anxious to see NIOSH's response or for NIOSH to say they do not have a response and they're recommending the 83-14. But I'm at least hopeful that we can prioritize, NIOSH could prioritize a response to this given that the next meeting is in St. Louis. The GSI workers will be there. Let's get it on the

agenda, and let's vote, and let's move on, and let's be done with this.

It seems to me there's been a -- well, let me back up. My understanding is NIOSH, this report on May the 2nd and is in the process of trying to find some minutes from SC&A's meeting with the workers.

John, you know, can any of you guys get those meeting minutes to NIOSH post haste?

(no response)

MR. STEPHAN (by Telephone): John Mauro?

DR. MAURO: The meeting minutes, I thought that was taken --

Bob, you were right in the middle of this.

DR. ANIGSTEIN: No, I was not.

DR. MAURO: There were some meeting minutes taken --

MR. ELLIOTT: I think the meeting minutes have already been taken care of. This is Larry Elliott, Robert.

MR. STEPHAN (by Telephone): Larry, do you have those minutes?

MR. ELLIOTT: Yes, the minutes have already been created. This was an SC&A set of

interviews, and we were, Bob was so kind to offer the invitation to some of our contract staff to participate in those, and she took notes. And in order to provide a clear record here, I asked her, our contractor, to complete a set of minutes based upon her notes and share those with John Ramspott and his crew to get comment and edit on those.

And I think that's where those notes are at. They're now being edited based upon the comments that John collected for us. So as soon as we can pull those together they will be distributed.

MR. STEPHAN (by Telephone): You're waiting on comments from the workers to those minutes?

MR. ELLIOTT: I believe that we have all of John Ramspott's set of comments and now the comments are being addressed in the revision of the minutes. And I haven't seen that completed yet.

MR. STEPHAN (by Telephone): Okay, is it possible, Larry, that we can get a response from NIOSH prior to the Board meeting?

MR. ELLIOTT: Well, we will do our best given the priorities of everything that we

have. And it's certainly our goal, as Stu alluded to earlier, to figure out what we can accommodate in this regard. We'll produce, even if it's a partial reaction, we'll produce what we can in advance of the Board meeting.

I would say that an 83-14 is not necessarily an option here. What I see in SC&A's review is another way of bounding the dose. So it's not been shown to me yet that we cannot bound the dose here. So it's not an SEC issue. It becomes a dose reconstruction approach issue.

MR. STEPHAN (by Telephone): Right, well, I guess what I mean by 83-14, maybe that is technically not the route. What I'm saying is that if there is disagreement over bounding the dose, at what point in time do we say, okay, we can't agree on that? Or we can agree. Maybe you can agree, and we'll find that out in advance of the meeting.

I'm just trying to think ahead to see where we will be and wrap this up as soon as we possibly can. I'm just very nervous we're going to have this meeting in June, and we're going to not have a vote in June. We're not

going to have a conclusion. We're going to be out in August or September, which will be highly frustrating to the workers and highly frustrating to the senator.

And we need to wrap it up at some point. So I'm just fearful that we're going to have a long, protracted process of disagreeing on what this appropriate bounding of this dose is.

MS. MUNN: Robert, this is Wanda. I think as best we can determine certainly everyone on the work group, and I believe everyone in the agency is extremely concerned with the issues that you raised, and we sincerely want, as you do, to bring this to closure as quickly as possible.

The reason we were having the discussion just prior to your comments with respect to when we could meet again and when we could anticipate having some responses that we can deal with at the work group. If, in the best of all possible worlds, we would have the findings addressed, be able to discuss it in a very abbreviated fashion and have some suggestion that we might place before the

Board at this meeting, but that is the best of all possible worlds, and none of us are sure we've been able to achieve that level of perfection yet.

We're going to do our best to try to do that. It's in our minds and in our hearts. Whether we can fulfill that is a reality we just will have to address at the time it comes along. So we'll keep our finger on the pulse and try to do the best we can. We've asked for time just before the meeting in order to see how much of this we can get our arms around. If we can get enough of it that we can bring something to the table, we'll do it.

MR. STEPHAN (by Telephone): So I'm understanding correctly, Wanda, you guys are proposing to have another work group meeting, not as an official part of the next Board meeting but prior to the Board meeting --

MS. MUNN: The morning before the --

MR. STEPHAN (by Telephone): -- person there in St. Louis. This is going to be the main issue that you discuss?

MS. MUNN: It will certainly be the first item on the agenda, yes, absolutely.

MR. STEPHAN (by Telephone): Okay.

DR. BRANCHE: But, Mr. Stephan, this is Christine Branche, just to clarify. What Ms. Munn said is that it will be the morning of the first day of the Board meeting is what we're proposing.

MR. STEPHAN (by Telephone): Okay, I understand. Thank you. Fair enough, guys. Thank you.

Thank you, Larry.

MR. HINNEFELD: Just to add one thing to the discussion, this is Stu Hinnefeld. We received recently an 83-dot-13 petition, General Steel Industries. So a -dot-14 petition doesn't matter assuming the evaluation here goes to the entire covered period and all the exposures, we don't really need to go the 83-dot-14 route. The decision would be coming out during the evaluation report on this 83-dot-13.

MR. STEPHAN (by Telephone): You have that 83-13 already ready to go?

MR. HINNEFELD: Well, the dot-13 is the petition that's received from a petitioner. We received it, oh, I guess it's a month or

more ago, and we received the initial petition. We have had conversations with the petitioner in order to make sure we get a petition in in form for qualification. And it looks like we qualified the petition. I'm reading now off our database.

It looks like we qualified the petition about a week ago, six days ago. So the petition's been qualified for evaluation, so it will be evaluated. So the 83-dot-14 technique avenue isn't necessary because we're farther along on 83-dot-13 if the decision ultimately is that the dose reconstruction is not feasible in that class. Now that's a big if. So if that's the decision ultimately we're farther along on 83-dot-13 than we would be on --

MR. ELLIOTT: I would also add to this discussion just so that the record is straight. That if it's determined that we cannot reconstruct this Betatron dose, then what good does that do a class? Because it's external dose primarily, and skin cancer is not one of 22 cancers covered under the class.

MR. HINNEFELD: Well, the 22 get covered.

MR. ELLIOTT: The 22 get covered, but skin cancer is left totally without any partial that we can do other than -- so there's that to keep in mind, too. Again, what I've seen today, and what we saw in Bob's briefing notes from last Friday in the report, it's not an SEC issue. It is a dose reconstruction approach issue.

MR. HINNEFELD: That's the way it sounds to me.

MR. ELLIOTT: I just don't -- there's a lot of confusion running rampant in southern Illinois about what all of this means. And to me it's not an SEC class issue. Yes, we have a petition, 83-13 petition, and we'll process that and evaluate it. But what we have before us right now in this review is a site profile-related issue.

MR. STEPHAN (by Telephone): Help me understand the timeline for this 83-13 and how that impacts the site profile that you're discussing now.

MR. ELLIOTT: Well, I hope that we'll have --

MR. STEPHAN (by Telephone): That will

eliminate some of the confusion.

MR. ELLIOTT: This is Larry Elliott. I'll answer your question as best I can. I hope that we'll have this scientific dialogue concluded on this review well in advance so that it can be added to our evaluation report. So we'll have settled this review set of issues and that will be factored into any evaluation that's done on the petition.

MR. STEPHAN (by Telephone): I mean, the normal SEC petition process takes quite awhile for the evaluation report et cetera. You're already pretty far along into that process is what you're saying.

MR. ELLIOTT: Yes, that's Stu's point.

MR. HINNEFELD: According to the database we're 33 days into the 180-day clock. The 180-day clock is from the petition to issue an evaluation report. And there is certain time for trying to work with the petitioner to get a petition that will qualify that the time doesn't toll. So right now we're 33 days according to our database, 33 days into the 180-day clock. The 180-day clock is to issue an evaluation report.

MR. STEPHAN (by Telephone): Okay. I don't want to take too much time here. I obviously have some confusion on my end or just some points I think we need to go over a little bit more. So I'd be happy to do that, Larry and Stu, if you guys are willing in a separate conference call.

MR. ELLIOTT: Surely. I think another confusion out there is that the dose reconstruction reports that we are producing may yield in some instances, for example, a dose estimate of 49.18 rem. And people are interpreting that to mean that's the probability of causation, and it is not.

So when I hear folks saying, well, I've got five or six cases here that I want to talk about that have almost the 50 percent probability but not quite, I want to talk about that. Well, I want to talk to them, too, because I want them to understand that what they're quoting is the amount of dose that's been assigned, not the probability of causation estimate.

MR. STEPHAN (by Telephone): Right, right, that was a source of confusion. I can only

speak to one case. I'm not sure about the other five.

MS. MUNN: All right then, it's my understanding, Robert, you're going to speak with Larry and/or Stu offline and clear up, and everybody get on the same page about where we are.

MR. STEPHAN (by Telephone): Yes, thank you.

MS. MUNN: Good, thank you. We appreciate your interest and thank you for chiming in.

We're right now at break time if that's all right with everyone here. We will take a 15-minute break. We will be back at 3:18.

DR. BRANCHE: Three eighteen. I'll put the phone on mute.

(Whereupon, the working group took a break.)

DR. BRANCHE: I'd ask that you mute your phones. I haven't talked about this in a couple of cycles. I just want to remind you the quality of the line for the other participants by phone is hampered if those of you who are on the phone don't mute your phones. So I do ask that you mute your phones and that if you do not have a mute button,

then please use star six and then use that same star six to unmute your phones when you're ready to speak. Thanks so much. I appreciate it.

Ms. Munn.

DISCUSSION ON OPEN, OPEN/IN PROGRESS, IN ABEYANCE AND CLOSED

MS. MUNN: I have allowed us a full hour on our agenda for this item, which looks as though it ought to be very simple, but it may not be. I call your attention back to our very first agenda item which was our summary of procedures and the discussion that we had at that time with respect to the items below the numbers, how we are going to define open, open-in progress, in abeyance and what is and is not closed. How we're going to get our arms around that.

Is there anyone who wants to start this discussion? Is there any part of this that you feel strongly about that you feel we should adopt immediately and move forward with?

(no response)

MS. MUNN: If not, then let's first take up

the question that we already discussed but have not brought to closure with respect to transfers. There are two issues that need to be considered. One is the language that we are intending when we say closed. The other is will we adopt, will we break transferred into two different categories, input and -- import and export, sorry.

DR. ZIEMER (by Telephone): Wanda, this is Ziemer.

MS. MUNN: Yes, Paul.

DR. ZIEMER (by Telephone): I sort of, I like Kathy Behling's suggestion to use the export terminology when we move it out of this database versus transferred terminology when it's moved within the database to a different location I think is how she described it.

MS. MUNN: That would give us --

DR. ZIEMER (by Telephone): I'm not sure on the transferred part of it exactly what she was referring to, but in cases where we transfer to a different item.

MS. MUNN: Yes, I think that she meant as long as we're continuing to deal with our Procedures work group database, transferring

from one page of the database to another page or to a different item within the database would be a transfer.

If we're going to send it off to some other entirely different database, some other work group or to the Subcommittee, then it would become an export. That would leave us then with three categories as opposed to the one we have now. We would have a transfer category. We would have an export category, and we would have an import category.

MR. HINNEFELD: Now, how is transferred different from the current status of addressed in findings? Because right now we have a status that says addressed in finding and then there's a blank and you put in the finding somewhere else within the Procedure database where it's going to be, where the answer can be addressed. And that sounds like what you just described as a transfer.

MS. MUNN: Yes, but the question that arises is that closed where it was. You see, it's not an import for the new item where it appears. It's a transfer in the new item where it appears, transferred from and the

date.

DR. ZIEMER (by Telephone): What would be an example? That may help me.

DR. MAURO: I recall one particular review that we were working on. It might have been OTIB-0004 and may have had 15 different findings. However, 12 of them were for all intents and purposes related. And in the end what really happens is when we deal with number seven, we have for all intents and purposes we have dealt with the whole thing. I remember that kind of conversation.

MS. MUNN: Yes.

DR. MAURO: And so we found ourselves saying, well, we don’t need these many findings. We really only use one finding which really captures everything. And I think that would be an example of why once that one are really being addressed elsewhere so we don’t have to track that one separately. So I think that’s at least one example where we said we could simplify this whole, at least in OTIB-0004, by simply saying really there are only, instead of 17 findings, we really only have four which would really encompass all 17.

And I remember we talked about that. What happened to that I'm not quite sure. If we opened up –0004 we might be able to find that out, but I think that's an example that this particular issue is being addressed as part of issue number seven. This issue number two is being addressed as part of issue number seven. That was all within one procedure.

MS. MUNN: That is definitely a transfer. That's not even a transfer to another part of the same database. It's internal to the one finding actually.

MR. MARSCHKE: We used that, addressed in finding seven.

DR. MAURO: Yeah, right. But one thing that I think we jumped over that I think is going to be more fundamental, I'm sort of a purist. If we're going to call something closed, I think that means the issue itself, the technical issue itself is closed. We've solved it. We've put it to bed, and we could write it in the scorecard and say this is a win. We've closed it out. I realize I'm just here in the capacity I'm here, but I like the, it's a simple thing, and if we could say

something is closed as opposed to calling it closed, when in fact it's really been transferred, is very disturbing to me.

MR. MARSCHKE: But basically we're not saying, I mean, we have a category, I mean, the thing that Nancy put together. She has not, each one is identified as transferred. They're not basically identified as closed, transferred and closed. I don't know what, you know, when you say transferred, it's still, I guess it's some place else. It's waiting for, eventually this will be closed.

I think some of these were the generic issues on like inhalation or something as I recall that were transferred to the generic issue. I'm assuming that when that white paper is issued, these that were transferred will then become closed. I don't think we should consider these transfers, the 11 that had been transferred, at this point they're transferred. They're not closed.

DR. MAURO: I agree with you.

MS. MUNN: In the case that you've just cited though, Steve, that case is not going to be a transfer. That's going to be an export.

MR. MARSCHKE: That will be an export, yes, because it's going outside.

MS. MUNN: It will go to the group --

DR. ZIEMER (by Telephone): Eventually it might show up as closed once the final issue is closed.

MS. MUNN: Exactly. Exactly. But for our purposes in this database at this time, that item is closed as far as we're concerned, but it is an export. And it would be shown in our database as exported to overarching issues or that's not the terminology we've agreed to use, but the group that is going to address generic issues.

MR. MARSCHKE: And when that generic issue has been addressed, then we will come back and we will have a working group directive which says, okay, the white paper has addressed that and addressed it in sufficient detail to resolve this issue. Let's change it from exported to closed.

MS. MUNN: That should happen automatically if our process works the way it should work. Which means that in the database that it goes to, it will show as an import from this

database. And anyone who closes an item which has been imported has the responsibility to close not only the item in the database where it's closed, but also in the database from which it was imported.

MR. MARSCHKE: That brings up, I'm not sure how to, yeah, that brings up another question of how to, how the imported as a status operates. When I have a finding which has been statused as import, do I assume, okay, that's imported, and it's open. And then when basically the issue is resolved I change it. If I change it to closed now, I've lost the source where that finding came from if you follow my direction or follow my logic here. We had in the status column that this particular finding was imported from somewhere else. Now we're going to --

MS. MUNN: And it needs to say from where.

MR. MARSCHKE: And it probably says from where.

MS. MUNN: It must say from where.

MR. MARSCHKE: It will say from where, okay. It will say from where. But now eventually --

DR. ZIEMER (by Telephone): It's sounding

like all of the cases where the status may change in time but you still have built into the system if you burrow down in, you find how it was resolved, and the details are there at some point, right?

MR. MARSCHKE: I guess that's the way you have to do it. You have to basically change the status sometime when --

DR. ZIEMER (by Telephone): Everything starts out as open. Then it goes to open-in progress. Then it may become transferred, or it may be exported, or it may be in abeyance, or it may be, so all of these are going to be changing status in time. So if you want to know how it got to the final thing, you still have to burrow down in and look at those sub-reports or those subsections within that finding.

MR. MARSCHKE: But when this one would not start as open. This one would start as imported.

DR. ZIEMER (by Telephone): All right then, however it starts that imported part will still have the information about when it was addressed and the work group and what the

findings were and NIOSH response and so on.

MS. MUNN: It'll have, its first indicator will be imported from work group on Procedures, date, what else? Then that's a flag that closure on that item requires feedback to the work group from which the item was imported originally.

MR. MARSCHKE: So that means it maintains that status until it's ready to be closed.

MS. MUNN: That's correct.

MR. HINNEFELD: You can accomplish this with statuses if you leave the word imported on all your statuses and retain the same status codes that you've used else time, but just call it imported-open would be the status it would come in as. It would be imported-open. It would be imported-open-in progress if we had talked about it. It could be imported-in abeyance if we promise we're going to change something that you retain the history that this didn't come originally from the review of the document of this work group, but it came from somewhere else, and you track it all the way through.

So that allows you to use the whole

complement of statuses on that finding while not losing the fact that you've got to tie this connection back to where it came from. Because I think in order to automate that tie-back to where it came from, you want to do it off status. You don't want to have to be searching through the details of a finding to automate the response.

MR. MARSCHKE: The only other option I could see on that is to have another field where you had a source field. And if you had a source field separate from the status field, if you had a source field, and in the source field you indicated it's imported. Or it's basically from one of the reviews that we did on the, or we could use that, the first set of reviews or the source is the second set of reviews or the source is the third set of reviews or --

DR. ZIEMER: Whatever works the best.

MR. MARSCHKE: Whatever it happens to be we could have a, instead of trying to put everything into the status, if we had a source field in addition to the status field, then we could do it that way as well.

MR. HINNEFELD: That'd be fine. I believe that's a developer's choice, you know, they would know how it would work better.

MR. MARSCHKE: So if we could talk it over with Don Loomis, and he can talk it over with your people and find out, I mean, if the working group concurs, I guess, that that's what they want to do. Or if we want to try and do everything in the status field, in one field, then we can --

DR. ZIEMER: Having a source field makes sense to me. If that's something that can be done simply, I'd say do it.

MR. HINNEFELD: I think we'd let the developer choose what works best for him. I'll bet he'll choose the source field because I think that will give him more flexibility. But I think we let him choose.

DR. ZIEMER: Yes.

MS. MUNN: It's fine with me. Anyone in the work group disagree with that?

DR. ZIEMER: I think it makes sense.

MS. MUNN: If not, let's pursue that course.

MR. HINNEFELD: I still have a question on while we're talking about these statuses.

We've now used the word transferred to talk about things that are going to stay in the Procedures database, right?

MS. MUNN: In our database for this work group.

MR. HINNEFELD: Up 'til now, the way it's been used now, it's been transferred relates to it's going somewhere else, like global issues or something.

DR. MAURO: We can close that.

MR. HINNEFELD: Yes, okay, for the things that are going to be addressed in the Procedures database just on a different page, we've used addressed in Finding such-and-such. So what you're saying now is you just now want to change that. Anything that's addressing in Findings should be now called Transferred. Anything that's currently called Transferred should be called Exported.

DR. ZIEMER: I think you're right.

MR. HINNEFELD: That's what we decided?

MS. MUNN: That was what I was proposing.

MR. HINNEFELD: Okay, I'm sure, I mean, it looks like there are about 11 transfers so that would just be 11 fields I could call up

the Addressed in Findings and see how many -- it's a data change that would have to be done.

MS. MUNN: Yes.

MR. HINNEFELD: Yeah, they're on the spreadsheet.

MS. ADAMS: They're on the spreadsheet.

MR. HINNEFELD: Nine Addressed in Findings and 11. So that's pretty modest. Since I don't have to do the work, I can say that.

MS. MUNN: Hopefully, we can do that without too much confusion to all concerned.

MS. ADAMS: And it looks like they're only in like three documents.

MS. MUNN: That's good.

Now is there other terminology that we need to discuss with respect to how these items are statused?

MR. HINNEFELD: Well, here's a thought that while we're worrying, let's worry that if the housing imported finding for just in the universe that we know, which is what we have today, we have an imported finding, say, dose reconstruction review. That would be a logical one where an issue would come up in dose reconstruction, but it really gets to the

procedure associated with that dose reconstruction, and so it should be referred to this working group. So this will be imported now to this working group.

Now suppose it's to a procedure that hasn't been reviewed. If you import this, if you import one and we've reviewed that procedure, you would import it, I guess, probably to the most recent version of the procedure that was reviewed. And it would have to be resolved at that point. I would guess that's where you're going to import it to.

MS. MUNN: That would seem logical.

MR. HINNEFELD: What if the finding is against a procedure that hasn't been reviewed? There's no place in the database to put them. So that would have to be something that would have to be designed. You'd have to add that procedure.

MR. MARSCHKE: That procedure would have to be added in. One of the databases that we have in there is a list of the procedures. And we would just add it in as a new, you know, we review any new procedure, we add to

that database.

MR. HINNEFELD: And a business rule so you'll know how to calculate all the fields. Because there's a finding date where we have just a handful of finding dates now because they correspond to the dates the products, the review products were delivered. So then we'll have new finding dates, presumably the date it's imported will be the finding date for this one finding. And however else the numbering scheme will have to have, be number one for that.

MS. MUNN: We have a problem already. This work group does not have the authority to ask SC&A to review a procedure that's been referred to us by the Subcommittee or anyone else. Only the Board has the authority to reassign these, to assign work to our contractor.

So if we find ourselves in a situation where we have to import something from other groups, which is not covered by the work currently being done by our contractor, we cannot accept that. We can only accept it in paper fashion until we present it to the Board

and the contractor as a request.

MR. MARSCHKE: So we can add it to the database, but we can't really work on it.

MS. MUNN: Exactly.

DR. MAURO: You know, we're almost letting the tail wag the dog here. Hold on a second here. I'm thinking about, all right, we built this process, and now we're trying to dream up all the different ways in which it could be defeated, and we could lose things.

MR. HINNEFELD: Well, that's what we do.

DR. MAURO: Now let's, in other words I could envision spending hours trying to say, okay, we're in the process of doing a DR review of case number blah-blah-blah. Now we come across an issue, and you say, you know, that's really a generic issue that deals with MDLs, and we're working on a procedure that, right now that it hasn't even been published yet, or it just was issued, or whatever. But we recognize the problem, and I think we need a procedure.

Now, what do we do with that? I mean in an ideal world we say we transfer it. Now, in my mind, okay, let's say we all agree it

really doesn't make sense to try to deal with that here and now because it will be or is being addressed in some generic procedure that either is under our review or is being developed. I think there should be a parking lot.

A parking lot whereby any time while you're doing a DR review, and you come up with an issue that says, you know, we really don't want to deal with this case because we think it has global implications, such as recycled uranium; whatever it is. And it really should be dealt with globally because it has ramifications across the board. So you don't want to deal with it there. So you want to transfer it now, but it really has no home. That's the problem. It has no home.

Let's create a home. That is, if we think it's something that belongs as part of a procedure review, then it goes into, automatically goes into this thing called the parking lot for something that we believe is generic, needs to be part of a procedure review although we don't know which procedure to put it in. And maybe we don't even know if

there is a procedure out here that it belongs to. There's always going to be, because we're dealing with how many, two hundred procedures.

MR. HINNEFELD: Something like that.

DR. MAURO: So, I mean -- and I could see us agonizing over which one we want to click it over to. All I'm saying is don't let's worry about it. Let's just create a parking lot for transfers that it goes in as part of our database --

MS. MUNN: I like a parking lot idea except, John, let's go back to our charter. Let's go back to who we are, and what we're doing. This working group doesn't have the responsibility for all the procedures that are out there. This working group was put together to resolve the findings of procedure reviews that our contractor brings back to us after they have been identified as topics for SC&A to look at. So our world is not the world of all procedures. Our world is the world of the reviews of procedures that have been looked at by our contractor.

So I'm not going to worry about imports that may be identified in other work

groups or concerns that other people may identify because if they're not identifying something that is already in our universe, then it's not our job, mon. That is a harsh way of looking at it, but we have enough on our plate without worrying about what someone else may find. I like the idea of the parking lot.

DR. MAURO: I'm not saying we have to resolve it though. I'm saying there's a parking lot for it, and the day comes when the working group and the Board decides they want to take on a particular item, it's sitting in the parking lot. It's there. But that doesn't mean we, as a working group and as other Tasks Three, need to deal with it, but we don't lose it.

See, I can see a situation where you don't want to deal with it on the Task Four DR review because it's generic and it's premature to take it on at that point. You don't want to lose it, so I guess we could make a decision. We're almost talking now the DR review process.

MS. MUNN: Yeah, we really are. We really

are.

DR. MAURO: Do we want to create a parking lot or not? If we don't, then we just leave it there.

MR. HINNEFELD: We could leave it there and fix it.

MS. MUNN: We're also talking about some of the things that Paul referenced in his recent memo that he sent out to all of us concerning the workings of the Board and how we were going to do things. And in my mind this kind of parking lot issue is the sort of thing that we've been talking about having Nancy undertake for us.

If we're going to have a parking lot, and I don't know whether we need a parking lot because I personally have not reviewed all of the circumstances that are attendant to every single one of the work groups and what they may or may not be doing. I can't keep up with that myself. If any of the rest of you can, then you're a far better man than I am, Gunga Din. But if we're going to have a parking lot process that I, it would be my hope that we could suggest that that be one of the kinds of

data tracking that Nancy will be responsible for.

DR. BRANCHE: Actually, I would offer this. Probably exactly what we had in mind in designing this opportunity for the Board using Nancy's services is that there were issues that seemed to be getting lost. One work group thinking that it was being handled by another. There was no formal baton hand-off. I think this is exactly what we had in mind for Nancy.

MR. GIBSON: But if you have a parking lot though, then that's going to create the need for someone to put a time ticket on each of those issues because they may not get lost, how are they going to be prioritized?

DR. BRANCHE: You're bringing up a new dimension that I think you should, you know, a parking lot certainly does have sort of a sense of rest to it. Maybe that's not the best word for it. I understand where John's coming from, and I think as Wanda already said, I think it's a good idea that he's raised it. But --

DR. ZIEMER: Wanda?

MS. MUNN: Yes.

DR. ZIEMER: This is Ziemer. Could I make a comment on this? The so-called parking lot is somewhat like our scientific issues list, if I can call it that, which has identified items that the Board thinks can be important in the future, some of which NIOSH is able to work on, some of which they aren't, but it is there. And at any time if we think something on that list is of higher priority, we have the opportunity to mete it out or ask that something be done with it.

I suspect this is something like that because the other work groups could say something similar to what you said in terms of exports from us to them. Wait a minute. The Procedures Work Group, they're not running our agenda. So all of the work groups can have this argument. I think the issue of what happens on items where one group thinks it should go elsewhere is exactly where Nancy can be helpful.

I don't know if we would call it a parking lot or if you want to call it something else, but it has to be something

that we review periodically to determine whether or not any of the items on that list are of sufficient importance or priority for some sort of action to be taken. For example, if something arises that's a procedure that's not one that we have reviewed or part of a procedure we haven't reviewed, it might raise the question in the future, well, is it important now to review that procedure in and of itself and also to resolve whatever that issue was that arose in some work group that they wanted to export to us. So it seems to me it's a workable concept, but we would have to use it to make sure that the items that were identified are ones that at some point should or should not be worked on.

DR. BRANCHE: I'm sorry, Paul, were you finished? This is Christine.

DR. ZIEMER: Yeah.

DR. BRANCHE: A couple things that I'd like to suggest because I think comments that you and Wanda and Michael and John have all raised are relevant. I wonder, however -- as I said I think the word parking lot gives a sense of rest that I think we don't want. And I think

it will be very important to find the right word to describe this particular, I'll call it a list or a place or a holder or whatever. But I would say that you raised the issue of priority, and I wonder if, as the Board Chair, there's some ways to handle that.

Perhaps before it's assigned to this location, the work group chair that wants to redirect it can give us (a) a sense of priority, and (b) a sense of timing. Because not everything, I wonder that not everything is going to be awaiting some action from NIOSH. As you said yourself, there are some things that are going to need some attention from the work group to which it's assigned.

It might be something that needs to be done by SC&A. It might be something that needs to be done by any of a number of people, a small number of people, but the action that's needed needs to be very clear. But I think it needs to be up to the work group. My suggestion rather is that it be up to the work group chair to assign a sense of priority and just, and at least give an indication of how much time they think it should take or what

sense of timing.

And then the work group chair to which it is being suggested that it be redirected can then accept that priority and accept that timeliness. I think you need to have, again, that baton hand-off or it'll just be a list that really is a parking lot. And I think Mike brings up a very important issue that you need to keep nudging it, and you need to have a periodicity of reviewing it.

But there needs to be a sense of taking on that assignment by the person to whom it's directed or it'll just sit there. And that's what's been happening up to this point.

MS. MUNN: A suggestion: may we suggest a process for the entire Board for certainly any other work groups that have these same kind of issues that they are dealing with that we adopt as a general procedure when we encounter a situation of this sort, it is the responsibility of the work group chair to identify the issue, to assess a priority to the issue, to relay it to Nancy.

And as a matter of course at each

Board meeting as a part of the administrative activity that we undergo, this be brought to the Board with the expectation that at that time whatever action is necessary be agreed to by the Board and accepted by whoever or which agency is going to be responsible for that. Is that not practicable method for approaching the problem?

DR. ZIEMER: It seems to me it's worth trying that.

MS. MUNN: If it doesn't work, we can tweak it.

Yes, John.

DR. MAURO: Let's say we know that brings us back to our what are we going to call that. In other words we started this conversation off what are we going to call as closed, transferred, imported and exported? So now we've gotten into a place where we say, okay, --

DR. BRANCHE: We're at the transport, export, import part.

DR. MAURO: That's where we are. We're going to leave, it's going to leave the purview of this room. We all agree. Or it's

going to stay within this room. Where we have this now, there are certain items that are going to leave the purview of this room. It's not going to be dealt with under Task Three anymore. It's going to be dealt with some place else. And what we just all agreed is that sometimes where that other place is we don't know. Although we do agree that it should be dealt with here, and unfortunately, we don't know where else to put it.

DR. ZIEMER: We could call it a status of exported issues database or something like that. Avoid the parking lot word.

MS. MUNN: Yeah, the parking lot concept is good, but the words are wrong.

DR. BRANCHE: Status of exported issues, Paul, is that what you suggested?

DR. ZIEMER: Exported issues, status or something.

DR. BRANCHE: Got it. That's at least --

DR. ZIEMER: Somebody can think of a better name, but --

DR. BRANCHE: I think that's what John's trying to stimulate.

DR. ZIEMER: But at least the exported part

sounds like something is moving as opposed to the parking.

MS. MUNN: Our reassessment of responsibility, something of that nature. I need a good thesaurus right here, and I don't have it.

MS. ADAMS: It becomes unassigned items or unassigned issues, I think, until there's an assignment made presumably by the Board.

DR. MAURO: In a funny sort of way the only area within our purview are the things we want to export. We really don't have within our purview where we think it should go because all we can say is we feel we have a mandate as a working group to deal with a set of procedures and a set of issues.

And every once in awhile we hit an issue that we say we don't think we can deal with this because it's really, for whatever reason we decide we wanted to export it. But do we know where it should go? I guess I'm a little ^. We don't know where it should go.

DR. BRANCHE: Actually, I'm going to counter that a little bit. Actually, you sit through almost all of these work group meetings and

several of the work group chairs, almost all of them, are members of some other work group. I would actually add a third dimension potentially, and that is potential reassignment.

I mean I think it's in Paul's purview to sort of bring it before the Board and say whether or not, but I think a suggested location for it to go. And if you just don't know that's different, but I think based on my short experience -- I can't use that excuse anymore, but based on my experience with the way the Board and the work groups operate, I think you have a fair idea of where it needs to go.

DR. MAURO: Okay, I'm good with that. Now, do we have any role about imports? No. It's the other work groups that want to get rid of theirs. In other words the Site Profile folks, the Dose Reconstruction folks, they say, we don't want to deal with this. Then they've got to get it to, hey, listen, we want to send something over to you. Will you be willing to take it? So we don't even have to talk about that. We don't even have to care.

In other words until it happens and somebody in another group comes and asks us, then we'll say, oh, okay. Then as a work group we say, by the way, we were approached by the Dose Reconstruction work group to please accept this item as a new item for our consideration. Then together we decide where it belongs.

DR. BRANCHE: But as Wanda said, that's what happens during this deliberation period at the Board meeting when you have this administrative session. Isn't this, that's when you take your ledger out and you do your horse trading. Forgive the analysis, but that's exactly what you're doing. You do your horse trading. You know, I'll take two if you take one of mine.

MS. MUNN: Exactly. And, of course, we, up to this point, have been fortunate. I think most of the issues that we need to export have almost all been global issues. If there is an exception to that, I can't think of it right offhand. Everything that I can think of is things that we keep encountering time after time after time. And we all agree. This is

not just this site or this procedure that is at issue. This is a global issue.

DR. MAURO: And as Christine pointed out, that's in our collective judgment. It seems to be a reasonable thing to do.

MS. MUNN: Exactly.

DR. MAURO: But I think we might be overstepping our bounds as to make the final judgment on where that belongs.

MS. MUNN: And the case I was trying to make was, that needs to be the Board's judgment. And that's why I was hoping we could have Nancy tracking for us.

Yes, Bob.

DR. ANIGSTEIN: What about suggesting a term. How about TBA, to be assigned, instead of parking lot?

DR. BRANCHE: Well, we've definitely dumped the parking lot.

MS. MUNN: Yeah, we've gone away from that.

DR. BRANCHE: The three suggestions that I wrote down that people weren't prepared to: status of exported issues, reassignment of responsibilities or reassessment of responsibilities were three. And now you're

offering?

DR. ANIGSTEIN: To Be Assigned.

DR. BRANCHE: TBA.

MS. MUNN: Well, but wouldn't it be TBR, to be reassigned?

DR. BRANCHE: Yes. Because it was already on one ledger. It needs to be...

MS. ADAMS: Purgatory?

DR. MAURO: Limbo, I like limbo.

MR. HINNEFELD: Purgatory's taken.

MS. MUNN: That would be marvelous, but I don't think that's quite the effect.

MR. ELLIOTT: I'm going to throw cold water on your humor here because it's not a funny matter to many folks who are claimants who are waiting for resolution of some of the issues that are holding up their claims.

MS. MUNN: No.

MR. ELLIOTT: Mark and I were just having a little sidebar here, and if I was saying some of these things I would be having phone calls coming to me. So I think you want to be a little bit careful in your conversation here with regard to affected parties.

MS. MUNN: And we certainly never mean to be

facetious when we're doing that, but you're absolutely correct, Larry. We do get a little rummy toward the end of the day, and our apologies. We certainly do not mean to be delaying or in any way causing any offense to any of the people who we are making every effort to serve as best we can.

ANTICIPATED FUTURE APPROACH FOR PRIORITIZING ATTENTION TO ACTIVE ITEMS

Is there another aspect of our following procedures here that we need to address? I have some concerns personally and have mentioned in the agenda item itself the question of prioritizing. We have done that pretty much on a case-by-case basis as things have come to us.

And as a result, we do have a great many items that still fall in the open category. We've not even bothered to take a look at them. It's not because they are not of some value, but it's because we have deemed them to be of relatively small importance with respect to their impact on dose reconstructions and the other activities that we've undertaken.

What is the feeling of the work group with respect to prioritizing and how we should address that in the future? Clearly, it's going to be a different issue now that we will be working, I hope, from our new database, and we will have the ability to sort on a variety of headings.

Do we want to include a priority heading for each of our issues or not? And if we do so, how are we going to assure that these numerous open items which we have so far failed to address actually come to the table? I'm open to any suggestions from anyone. Yes, John.

DR. MAURO: Taking some guidance from the experience we gained from dealing with the closeout of the issues on Task Four, all of the DR reviews, there are 240, I think altogether cases. We're up to the fifth set of 20, sixth set of 20.

And I could tell you the way they were dealt with. There was a paper matrix that got very thick. We started from the beginning and ground our way through. It was hard work and Mark is there diligently, you know, tracked

this one by one. I don't recall if we tried to do any prioritization. Now, maybe in that case it wouldn't be appropriate, but I'm one to grind things out.

In other words we'll start from the beginning and just work our way through. And then today we got through with the first part of -- in other words, by jumping around I feel as if things get disoriented. Where are we now? It's so easy to find out. We looked at that procedure three months ago. Let's go back to this one now. I mean, I don't know, I, for one, again like the idea of grinding them out.

Start from the beginning and the next meeting, well, we left off at this procedure, issue number five in this procedure, and just pick it up right from there and just keep going down the list. I'm putting on the table for consideration by everyone.

MS. MUNN: From a technical and procedural viewpoint, I would agree with that. From a reality and political viewpoint, I don't see how we could make that work.

MR. MARSCHKE: Could I offer maybe as a

compromise that we prioritize the procedures as opposed to prioritizing the individual issues and say, okay, we're going to look at, we give a certain procedure a high priority, and we work off all the issues associated with that particular procedure and close those. And then you're not jumping around from procedure to procedure to catch all the high priority issues, but you're going to catch all the high priority procedures.

DR. MAURO: I will respectfully disagree for the following reason. The importance of a given procedure is within its context and application to a particular case. And so I don't think you could just simply de novo or say this procedure's more important than that procedure.

I think that depending on the case, you know, that procedure may be the whole ballgame and affect this class of procedures. In another case, let's say it doesn't deal with skin cancer or one that deals with lung cancer, whatever the issue is, that procedure becomes the most important procedure when it comes to that class of cases.

So I think I could see us spending an awful lot of time debating which procedures are the more important ones. I think they're all of importance, and it's going to be very difficult for us to prioritize them. I guess that's how I look at it right now.

MR. MARSCHKE: Well, let me give you the counterpoint. If we go, if we have a half a dozen procedures and each one of them has one high priority finding in it, and we address all those high priority findings, they don't get implemented until the procedure gets revised, until the procedure gets revised. And so addressing all the high priority ones does not really do anything because it doesn't get the procedure revised.

DR. MAURO: Don't prioritize. I mean, when I look at the procedures and the scorecard that we use, we call them, I think the words we use in terms of the review of the procedures was does the procedure do the following. In other words, it asks a question that's ^ driven ultimately. It's not saying almost, never --

MR. MARSCHKE: No, John, you're looking at

something, we're talking about something different. The first set of comments that we came by with that Roy prioritized the findings as to whether they were high, low or medium priority.

DR. MAURO: Is it procedures or findings?

MR. MARSCHKE: These are findings.

MS. MUNN: Findings, uh-huh.

MR. MARSCHKE: And so the question now, that has kind of gone by the way, been set aside for the second and the third and subsequent sets of findings.

MS. MUNN: It's been overwhelmed by current events.

MR. MARSCHKE: Exactly. And also, it's not in the database as a separate field. It's buried in the comment field, and Nancy is shaking her head yes. She had this. It's hard to go in the database and try and dig that information out. If we want to continue such a thing as this, we, you know, I guess the question before the working group is do we want to continue such a thing as this, and if so, how do we best do it.

MS. MUNN: If I remember correctly, in that

first set we were, first of all, not quite as overwhelmed as we are now. We didn't have the mass of data that we currently have to deal with. And we also relied pretty heavily on our contractor to help us analyze what that level of priority needed to be for that first group. If we're going to continue to do this, we need to decide how to do it. And if we're not going to continue to do it, then we need to decide what our alternative is. So far I don't think we've gotten there.

Yes, high priority. We did it on the first set.

DR. ZIEMER: What was the basis for that though? The impact on the individual dose reconstructions?

MS. MUNN: I believe so. I think we were looking at the scope of what the total impact was going to be. How crucial was this procedure to moving down the road with dose reconstruction.

MR. HINNEFELD: It was the finding, how crucial was the finding --

MS. MUNN: It was the finding, yes.

MR. HINNEFELD: -- to dose reconstructions

because there would be some findings that would speak to the clarity of the procedure or the organization of the procedure, and those normally were granted one for those, but it was put on every finding. And so there are 240 open findings or 237 open findings. To do that same thing now would be to go back to those 237 most of which have not had that, most of which are from the later reviews, and put that on every one of those 237 probably minus the 29 from the CATI.

DR. MAURO: You see, to me, okay, we're in procedure number one, and we hit the first one which is, you know, this ^ uses Roentgens instead of rads. Okay, that's in three seconds. Let's move on to the next one. In other words it's not going to slow us down. We don't have to do that. And when we hit the one that says, my goodness, this is important, we're going to spend the time on that one.

So it's almost like embedded in the process itself, the grinding through. We're going to move through, and there are a string of real easy ones. So to me we're going to need to deal with these. In other words we're

all going to agree, yeah, that terminology needs to be cleared up, and let's say clarification is needed. And we move on to the next one. I like the idea of marching through these things. Sometimes we're going to hit a streak where we move real fast, and then we're going to hit slow ones that will slow us down.

DR. ZIEMER: From a practical point of view -- this is Ziemer again. From a practical point of view would we end up spending a lot of time trying to prioritize the findings versus simply -- it's much easier it seems to me to prioritize which procedures you're going to review, you know, prioritize at that level. And then once the review is done to address the items that are found across the board.

MS. MUNN: But the Board identifies what procedures are going to be reviewed.

DR. ZIEMER: Yeah, once that's done.

MS. MUNN: Once that's done then how do we then decide what this group is, are we just going to follow the calendar and --

DR. ZIEMER: What happens is if you end up having to discuss each item to figure out what

its priority is, you might as well be discussing it and resolve it.

MS. MUNN: But are we going to just simply do the procedures in the order that our contractor provides them to us?

DR. ZIEMER: Oh, the procedures.

MS. MUNN: If we're going to prioritize the procedures --

DR. ZIEMER: Well, prioritizing procedures to me is not the same as prioritizing the findings from the procedures. Are we talking about prioritizing the procedures to be reviewed?

MS. MUNN: No, no, that's the job of the Board. That's not our job. But once the procedures have been identified and sent to SC&A for their review, then they're going to do them in some calendar manner. We have no control over how they're going to appear to us unless somebody's beating up on them about how they have to have this set of findings immediately.

Now, what is this working group going to do in terms of priority in addressing the procedures that come to us? If we're going to

address them by procedure rather than by finding, are we going to just simply accept the calendar presentation as it comes to us from SC&A or are we going to prioritize by finding? We have both suggestions on the table, that we prioritize by finding and that we prioritize by procedure. Which are we going to do?

MR. HINNEFELD: Well, I would really suggest we absolutely not prioritize by finding.

DR. MAURO: I agree one hundred percent.

MR. HINNEFELD: You spend just far too much time prioritizing if you went through all these findings and put a priority on these findings. I think there's an argument to be made by going from the calendar and just take the one from the oldest review and work through that.

Because, honestly, if we try to prioritize procedures today, it may be different three months from today based on how events break down. I'm talking about procedures that already haven't been reviewed and what's a hot issue and what's not. And I think just from looking at the titles there

are a sufficient number of them that you'd say, well, this sounds like it's relatively high. Well, I guess this is relatively high.

I mean, there are several coworker approach, dose reconstruction approaches on here. Those are all going to come out the same. I don't know that you're going to accomplish a lot by trying to prioritize a procedure because we don't have any criteria for prioritizing procedures. We'd have to make that up first so it's another delay. You know, prioritizing is another delay built in before we actually start resolving anything.

So I guess I'm a proponent of working by the calendar and just say the one from the earliest findings, go through that, and then from the next set of findings just work your way down through them; that would be my suggestion. Because I think it gets us to work at closing findings sooner.

MS. MUNN: As I said before, I couldn't agree with you more from a technical and professional standpoint. In reality I have just committed on the record to an important congressional staffer that we are going to

make every effort to look at this process that's important to him and to his senator by the next meeting. If we do that, and if it's going to be the first item on my agenda, then the second item on my agenda, if we adopt this we're going to do it by calendar issue, is open procedures from set one.

Now, if we do this, then the members of this work group need to accept that flak that you're going to get as a result of that and hold firm to all of you hold good and true if that's what we're going to do, then that's what we're going to do. Because we can't, we can certainly make exceptions to any rule, but the reason I wanted to have this discussion is because I'm not certain where we're going with this new process.

DR. ZIEMER: One other thing to make note of is that in reviewing this particular one, we have moved from what looks like a general procedure review to what looks more like a site profile review. And for that reason we now have the congressional pressure on this particular one that you might not otherwise have if you're just reviewing a particular

general workbook or something like that.

I think insofar as we have said that these OTIBs and these appendices are in our purview, we have expanded into an area which is going to be more political in that respect. And then we're going to have to deal with the realities of the time clock. This thing is going to involve possibly an SEC petition. And so this is a little different animal than we normally have encountered for this particular work group.

DR. BRANCHE: But I would offer, Paul, however, a couple of things. The congressional staffer to whom Wanda made the obligation is not the only one who listens in on the calls for this particular work group.

MS. MUNN: No.

DR. BRANCHE: And so I --

DR. ZIEMER: Well, I understand that.

DR. BRANCHE: No, I just want everybody to understand that once this kind of obligation has been made to one, don't be surprised that when another site comes up where there's particular sensitivities or a timeliness issue, it might come up again. And I think

the Board has always tried to -- individual Board members over work groups and the Board in general have tried to be sensitive to those various issues. I just don't think you should think this is an exception.

The other thing I don't think I explained as well as I probably can now is when we were talking earlier about rendering issues to another work group, and that the work group chair who is proffering that particular topic or that particular issue to another work group or to the Board in general on this list that we have yet to name properly, when I suggested that there'd be a sense of priority, I did that because there are a number of sensitivities, some political, some others that that work group chair would have information to support and in offering a sense of priority.

Not that anything should be left undone. Not that anything isn't important. But there can be some issues and sensitivities that can be brought to bear by the work group chair when they're suggesting that this issue come out of their work group and potentially

be reassigned to another. And so that's another kind of information that would need to be observed and taken into account by the work group chair that's taking it on.

So it isn't always about timing or how long an issue has been on your docket. I think what many of you have said is a good procedure. I'm not offering an opinion. I'm just trying to make sure that you bear in mind that there are some other considerations that need to be brought to bear. I'm done.

DR. MAURO: I was going to bring up exactly the point that Dr. Ziemer brought up is that we do have, when it comes to Appendix BB, TBD-6000, -6001, it's sort of an anomaly. They really are site profiles and as a result as Dr. Ziemer pointed out, there is a little bit different kind of attention to be paid to it. It's also true for procedures that are site specific.

If you look at the list of 133 procedures that we've reviewed -- that's the total number I think -- you could look at it and see a whole bunch of them are not site specific, but there's a handful that are

whereby there could be site-specific interest there. And I think the ^ would be Appendix BB because it's actually a site profile.

Now there are others that we've worked on -- I mean, this is just an observation -- that I know we have a lot of attention, OTIB-0052, which is a construction worker coworker model that has universal applicability to construction workers at sites across, which I know a lot of attention has been given by a lot of folks to that.

A big effort went into that. Steve was involved in it. I know that the ones that Arjun completed on OTIB-0090 and -0097 I believe, interaction with the claimants. I mean, what I'm saying is that we probably could sit down and say rather than prioritize all the 133, I'm saying that there probably could be supported in dividing into groups that we feel are generally of greater concern than the rest.

I don't know if that's a compromise or something you would not want to do. But I know right now someone could ask me what are the four or five that you're thinking need to

hit hard and hit hard now. And I just mentioned a few of them just now. Because I think there's a tremendous amount of media interest and people waiting for the outcome of those.

Now whether or not you want to make that one of your reasons why you give it a high priority, that's certainly a judgment of the Board and the working group. But I think that that's really what we have here. We do have a handful. Of the 133, maybe ten or eight everyone recognizes, yeah, there's a lot of interest in those. Whether you want to put them high on the priority or not, that's a tough call.

MS. MUNN: Is there a compromise? Is there a way that we can devote a given portion of our deliberations each time to the calendar priority and a given portion of our time to other pressing priorities? Is that the only legitimate way we can address it?

Mike.

MR. GIBSON: Well, I think, you know, that the process is consuming us. And I just think that I kind of agree with John. We just need

to start at the beginning and go through and work on these things. Who's to say we have to have a fast and set rule that we're going to go by?

We start at the top and just start working the issues. If something interrupts us, whether it's political or whether it's the need for a higher priority, we can stop and address that issue. But other than that spend our days meeting and resolving issues rather than trying to figure out how to resolve them.

MS. MUNN: The only reason I'm attempting to do that now is because we are shifting gears so markedly from the way we've addressed things in the past to the way we're going to be doing things in the future. And we're going to be relying so much more heavily on the database and its ability to sort material for us.

MR. GIBSON: Well, I guess I'm just saying let's get to work and as we see issues come up with the database, let's stop and address them and go on rather than try and figure out the kinks that could be in the system or that we obviously see. Let's see how it affects us as

we're doing our work. And if we have to stop and fix them, stop and fix them.

But every issue there's some more political than others or whatever, but just about everything we work on in every work group stems back to some claimant. And the more time we spend trying to figure out how to do things as opposed to doing them, it's affecting someone.

So we're not going to please everyone. We're going to get political pressure and everything else, and we might make exceptions but, you know, I'm speaking for the work groups I'm on, too, that I chair, too. Maybe we just need to get to work more instead of watching how this process is starting to kind of consume our time.

MS. ADAMS: You hit the nail on the head in terms of moving to a different approach. Everything's an iterative process. And so you start into a new cycle of how you're going to tackle things, and it's like learning to ride a bike. I mean, you're going to stumble at the beginning perhaps and do some things that six months down the line will seem clumsy

because now you've got experience that you didn't have at the forefront.

And that therefore, then you can use the benefit of that learning, that clumsy period, to move into becoming a more effective and efficient period from learning how and what the database can and can't do. What going back and looking over some of these things that have been sitting around for awhile might trigger in your mind that if you attack this one, it may have a relationship to something else, and you can kill two birds with one stone or more. I mean, I think you're at a point where you've got to see what happens.

MS. MUNN: We have some idea of what we're going to do. I'm not sure whether we've come to a complete conclusion about what we're going to do. I would hope that in the very immediate future, Nancy, will you be able to accommodate these comments that we've made and agreements we have with respect to the changing in terminology so that we can look at our next summary with the new terminology in place?

MR. HINNEFELD: You're talking about the new statuses?

MS. MUNN: The new statuses, yes.

MR. HINNEFELD: They'll have to be entered by SC&A. Nancy looks at the same version I look at. She can't do any data entry.

MS. MUNN: So the question really needs to go to you and not to Nancy.

MR. HINNEFELD: The question has to go to SC&A.

MR. MARSCHKE: It goes to me. I think it comes to me. Yes. Yes, we will be able to do that and change, transferred will be changed to exported and we will add a, well, what did we decide? We're going to talk to Don Loomis and find out whether we're going to add a source field --

MS. MUNN: Yes.

MR. MARSCHKE: -- or whether we're going to add an imported open, imported closed --

MS. MUNN: Correct.

MR. MARSCHKE: -- so I have that as an action item that I have to talk to Don who will figure that out. And by the time the next Board -- we'll talk to you, obviously,

when I get an answer from Don. And once we get your agreement, it will be implemented before the next working group meeting.

MS. MUNN: Please, Steve, I'd like to do that very much because I intend to utilize that database to establish our agenda that is going to occur for our 24th meeting.

MR. MARSCHKE: Now, one other thing that we want to make a change to the database, and I don't know. We want to make sure that we have the ability to do sorts on the date of the meeting. Any action items that came from the meeting or from a particular meeting date we want to be able to do a sort on that to see if either of the action items and these were, have been dismissed or --

MS. MUNN: What the status is.

MR. MARSCHKE: What the status of those action items are. There's a couple other bookkeeping questions. Maybe this is a good time for me to ask. I would like to ask just, there are housekeeping-type questions I would like to ask about the database. The first one being is, do you want Bob's Appendix BB and his findings into this database or is that

this is a procedures and a documents database? Does that more go into some other database? Right now it's not in this database. Do you want it to be added to this database or not?

MS. MUNN: What is the opinion of the group? It's my opinion that it goes into this database because this is where it started. Whether it stays here is a different question. But in my opinion it should start here and be incorporated in the database in this work group. Anyone feel differently than that?

MR. HINNEFELD: I agree with that, yeah.

DR. MAURO: And that includes TBD-6000, -6001?

MR. HINNEFELD: Yes. If we're going to take care of them in here, let's put them in this database.

DR. ZIEMER (by Telephone): Yeah, I think that's fine unless it becomes unwieldy.

MR. HINNEFELD: We're already there.

MS. MUNN: Too late.

DR. ZIEMER (by Telephone): But you have the ability to separate out a section of the database if you want to.

MR. MARSCHKE: Oh, yeah, we can always pull

it out.

DR. ZIEMER (by Telephone): If you have a meeting, you can have this part of it.

MR. MARSCHKE: Right, exactly. We can only do a sort just on Appendix BB and just --

The other one is a little bit nit, but we have a status called open-in progress. Right now the database gets confused. When you do a sort on open, you not only get the open number, the procedures, or findings I should say, but you also get the open-in progress findings.

DR. ZIEMER (by Telephone): Why don’t you just change it to in progress; that implies that it’s open?

MR. MARSCHKE: We would like the group’s permission to do that.

MS. MUNN: No objection here. Any objection?

DR. ZIEMER (by Telephone): No.

MR. MARSCHKE: Thank you.

MS. MUNN: Anything else with that regard?

DR. MAURO: I have a thought. When you started talking about breaking out procedures, the idea being we’re going to have another

work group meeting. Would not it be a good idea to say which procedures do we want to try to review at the next work group meeting? And then we simply print out electronically those as opposed to the full monster.

In other words let's say it turns out we do want to cover all of the issues raised in Appendix BB for the next meeting. If we know in advance which ones you'd like to address by procedure, there's only 133 ^ is 136 procedures that are in there. And if we started pulling them out, so I guess in a way I was of a mind that we start to drive through from OCAS OTIB-0001.

But in my mind an equally possible way to do it which is very functional is that at the end of every meeting, the working group identifies which ones do you want to take on at the next meeting. And then during that time period NIOSH and SC&A work together on filling and fleshing out that particular one so that when we show up, they'll have dialogue, exchange and filled in a lot of the information and we bring them to the next meeting.

Okay, for the procedures which you gave us marching orders on, here's what we've accomplished. And then at that point the working group decides which ones they want to, which issues -- let's say we recommend closing this. We recommend that this be exported. We agree to disagree on this one. We really can't resolve this one, this issue. In other words what I'm getting as is the idea being at least when we come in the door the next time --

-- See, I think this was a very special meeting. Because what happened was up until now we've built the bicycle and today was the first day we tried to ride it. And we fell off the bicycle. But I think the next time maybe as an idea, it wouldn't be a bad idea to say for the next meeting let's see between now and then we can do everything we can so that we could make a meaningful assault on at least these three or four procedures and get that done including, of course, Robert Stephan's Appendix BB. If that's what you'd like us to do, you give us the marching orders and off we go.

MS. MUNN: You're one step ahead of me, John. It was my hope that as Chair I would try to do something very similar to that for our next meeting. And then at the end of the next meeting fall into what I hope will be a fairly easy process similar to what you've outlined so that we all will agree in the work group what we're expecting to do the next time. And it will automatically fall out of the database as we begin to look at it. I'm hoping that that will be the case.

Let's see, especially since our next meeting is going to be a short one, let's see if I can manage that myself this time. And at the end of that next meeting we will undertake to do something very similar to what you have suggested if there's no objection to that from the work group.

DR. ZIEMER (by Telephone): Sounds good.

MS. MUNN: Good. Are we are a point where we can leave this item?

DR. ZIEMER (by Telephone): Yes.

FINDINGS ON CATI PROCEDURES FROM 1ST SET OF REVIEWS

MS. MUNN: If we are, then let's move on to the final real item that I had with respect to

the findings on CATI procedures from the first set of reviews. A question had been asked about that. Who wants to address that?

MR. HINNEFELD: I think this is me.

DR. ZIEMER (by Telephone): What is the issue?

MR. HINNEFELD: Well, the CATI procedures were Procedures 4, 5 and 17. They've been consolidated into Procedure 90. There's something like 29 findings that are all listed as open. I think we talked about these once long, long ago, but that's okay. Let's leave them open because it's so long ago I don't think it counts.

We've provided some initial responses, and there are a number of things that we've done that we're doing in addition to our initial responses. One of our initial responses, in fact, to several of the procedures was the findings spoke to we're not telling the claimants enough information in the CATI. You know, we're not giving enough information.

Our response at that time was we don't think the CATI is the place to do that, but we

agree we should give them more information. So we're going to change what we call our acknowledgement packet. In other words when a case is referred to us from the Department of Labor, we send the claimant, it used to be a letter, now it's a packet, acknowledging that we have their claim to do dose reconstruction on.

And we've expanded that so now it's a packet. We think it addresses much of the information from those findings. Now, I believe I distributed that, I'll mail them to everybody. We'll send to everybody in the work group, John and some of the principals or whoever you want me to. I'll send you several. If I can get them electronically, I'll just do them electronically so that you can see this is what the acknowledgement packet now looks like.

We believe this addresses what is right to address from these findings in the CATI. The CATI shouldn't say this. It should say something else. We've made some changes. We have recommended some changes in the CATI language to OMB, and because the CATI form was

due for renewal anyway. So you have to go back to the OMB and get re-approval to continue to use this data collection device. So we have incorporated in our recommendations, in our version that will go back to OMB, some changes based on some of the findings from these CATI procedures findings.

I can share those with you. I actually have hard copies of those today. There are three of them. There's one for an EE claimant, one for a survivor claimant, and one for a coworker. They all have their own script. So those things have been done, and that can be shared today. I can also share it electronically because I have it electronically. So those are some of the actions that we've done.

Let me take a look and see what I'm forgetting here. I think some of these findings you'll see, I mean, these findings go way back. These findings were written in -- what did we say? -- in '05 or something?

MS. MUNN: This was one of the first things we did.

MR. HINNEFELD: So these findings go way

back so I think some of the things about how well things are described, and of course this is CATI Procedure, I think you'll find there is a better job done now in a dose reconstruction to really show the claimant this is how we use your CATI information. I think that's just done. But I don't know that it's something I could show you this procedure was changed to do it.

I can just tell you that the dose reconstructions now, they have to address everything that's said in the CATI even if it's not relevant to radiation exposure. If the person mentions in their CATI about their chemical exposure, I was exposed to those chemicals when I worked there, too, we include that in the dose reconstruction report.

We say the EE was exposed to these chemicals, but that doesn't include, doesn't count as radiation dose so it doesn't affect this report. So everything they say is included, is addressed in a CATI, in the dose reconstruction. So I think we've done some things like that.

Now, of course, there's always the

question that somebody's going to say we should have done more, and maybe there is more to do. But I think the first thing to do is for me to get out to you the best I can what our current position is on these, and I can have those out relatively quickly. You know, where we are now, where we expect to be. And in addition, we are revising this PROC-0090 now. We are revising PROC-0090 in order to change it to, essentially accommodate the other things that need to be accommodated from the findings to the extent we think we can.

One thing I think I should probably mention so that it's not a shock when our response comes over. There's been a certain, there was a certain number of the findings about helping a survivor claimant to the interview and sort of, for lack of a better word, coaching them, but telling them more so that they can -- because they're certainly going to be at a disadvantage from an EE claimant because they're going to know far less about what the work was than an actual EE claimant.

EE by the way is energy employee. It

means the energy employee is still alive. So in that case we have some concerns about coaching. And people who know about interviewing, which I'm not one, people that know about interviewing say one of the first things you understand when you develop an interview is you don't design it to coach the interviewee.

So there are some things like that that we don't believe we'll go along with for that reason. But there are a number of things that we are. And it's just I think it's up to us to get the latest information out to the working group and to the principals at SC&A so we can kind of see where we are and where we want to go before we decide to talk about this.

DR. MAURO: Mechanistically, am I hearing that you're going to load up the database --

MR. HINNEFELD: Actually, I ask you guys to load it for me because I don't write it.

DR. MAURO: And you guys are not ready to take to the time, so you'll provide us with information and we could look that you would load up --

MR. HINNEFELD: We'll suggest to you this is what we would like you to load. This is what we would like you to load. We may send some supporting information, too, that --

DR. MAURO: Then there'll be a white paper.

MR. HINNEFELD: That may want to be attached to it or something like that.

DR. MAURO: And that would address, I guess there were two procedures then. There's --

MR. HINNEFELD: Well, there were actually three originals. Those findings are all now under PROC-0090. And while we're talking about that, this is one of the things you asked us to think about all day, had to do with these findings, counting the procedures, the findings by 29.

We want to make this recommendation because if it would undo something that was done on my earlier recommendation, so I certainly feel that I'm capable, you know, I don't feel any pride of ownership or pride of ownership. On the other hand it might give you pause about whether you want to listen to my advice any more.

But the reason we're counting them

twice is because we listed them twice. And the reason we listed them the way we did is because we didn't have findings against a procedure that doesn't exist any more. Well, suppose we just dealt with that. Kept the procedures under four, five and seven, just eliminate PROC-0090 because PROC-0090 has never been reviewed. PROC-0090 has never been reviewed by SC&A.

Keep the findings on four, five and seven or 17, and just say in there, in our response, these procedures have been consolidated to PROC-0090, and PROC-0090 will be revised to address these findings. And so in the future people will know they have to look at PROC-0090. And, in fact, we can put it in the title of the finding, you know, now PROC-0090 or something so it's easy to find. That gets your extra 29 findings out of the database.

MR. MARSCHKE: Actually, haven't we already done that? Isn't that already --

MR. HINNEFELD: Well, we did it the other way. They're in there closed under four, five and 17. They're in there as closed.

MR. MARSCHKE: But there is a note underneath, there is a note --

MR. HINNEFELD: On PROC four, five and seven.

MR. MARSCHKE: -- on four, five and seven that these findings have now been transferred to PROC-0090, and in PROC-0090 there is a corresponding note that this finding came from -- well, there is kind of a cross in the database.

MR. HINNEFELD: Well, I think the database is fine now except for the fact that we've got 29 extra findings. And Mark was talking about, well, Mark was the one that brought it up. We're really overstating the number of closed findings because those findings really aren't closed from four, five and 17. We're just not tracking them there.

And so that leads to the conclusion, yeah, well, we're overstating the 29 and so therefore, we've overstated the total number of findings by that same 29 because I think you show that in the closed column. So if we wanted to address that, if we want to deal with that, I'd say you just eliminate the

PROC-0090 piece altogether, reopen, change the status to open on four, five and 17 and then you'll have the right count on the number of findings. It won't really change the quality of the information they're in.

MR. MARSCHKE: But you've just eliminated these 29 findings.

MR. HINNEFELD: No, we just opened them up in four, five and 17. And the action is to, what you're saying, the action, these have been consolidated in PROC-0090, PROC-0090 is being revised to address.

DR. MAURO: Would you provide also for each issue how you plan to deal with that issue and which you agree with and which ones you don't?

MR. HINNEFELD: Yeah, that's sort of what I need to provide really quickly regardless of what we do with the database. I need to do that pretty quickly.

DR. MAURO: So that will be there, and those will be considered. These are open-in progress or these are -- in other words, a label then for that procedure would be in progress and here's all the information. And you put in that information.

MR. HINNEFELD: Well, I think it will be in progress when we talk about it. Isn't that what we do? I mean, don't they remain open until we actually have a discussion at the meeting?

DR. MAURO: We're doing that right now.

MR. HINNEFELD: Okay, well, that's okay with me.

DR. MAURO: Isn't that what we're doing?

MS. MUNN: Yes, that's what we're doing.

DR. MAURO: So in effect what I'm hearing is that for those procedures, and we have right now loaded up with our comments, you're going to put underneath each comment a statement as to how you believe this needs to be dealt with. And then so you're going to flesh that out maybe by giving information to Steve.

MR. HINNEFELD: Right.

DR. MAURO: Our job at that point will be go underneath that and say, okay, yeah, we agree this looks like it resolves that issue. In a similar matter you're going to do, to the extent you can, you're going to try to go as far as you can with Appendix BB.

MR. HINNEFELD: Yes, yes.

DR. MAURO: So at a minimum what I'm hearing right now is for the next work group meeting the extent to which we can go into, all this material between now and the next meeting, this is going to be loaded up, Appendix BB and these three procedures are going to be loaded up in combination by Steve and Stu, and we're going to talk about them next time we get together at a minimum. Now there may be more things you're going to talk about, but it seems to me at a minimum we're going to try to do that.

MS. MUNN: Absolutely. Yes, we will. We're all on the same page. We all know what we're doing?

MR. MARSCHKE: I don't know what I'm doing.

MR. HINNEFELD: Well, we haven't decided really for sure what we're going to do with the database. I don't really care.

DR. ZIEMER (by Telephone): As long as it makes sense.

MR. HINNEFELD: I don't really care what we do with the database. I just thought that that would be a way to get a count of the number of findings. But I don't really, I

mean, I think the quality of the data and the way it's represented is pretty clear right now in the database. I don't have any particular issue with that. But it does screw up the count.

MS. MUNN: And it would be nice to not mislead anyone who looks at the bare numbers. It would be very nice. All right, we're happy with that.

HOUSEKEEPING; ACTIONS; NEXT MEETING

Housekeeping items.

MR. MARSCHKE: Can I just say on one of the other OTIBs, OTIB-0052, which is on Nancy's sheet here. It's the 7/30/2007. It's got 16 findings against it all shown as open. Well, by the definition of the current definition of open, these 16 have been discussed because I was at the meeting. I gave my presentation. Mel Chew was there as well. He gave his talk. So at a minimum, these 16 should be moved through the in progress out of the open column, into the in progress column.

MS. MUNN: Absolutely.

MR. MARSCHKE: And maybe what we can do is we can look at NIOSH's responses --

DR. MAURO: Do we have any responses?

MR. MARSCHKE: They have provided the responses. They are loaded up in the database. We can look at the responses and maybe at the next group working group meeting give our recommendations whether or not we agree with the responses.

MR. HINNEFELD: I wasn't going to bring it up today, but it was our understanding that certainly several of those 52 we thought were closed. We didn't think any more were due.

MR. MARSCHKE: I think you're right on that.

DR. MAURO: Is that a third procedure you'd like to give us marching orders on?

MS. MUNN: Absolutely.

DR. MAURO: Do the same thing with OTIB-0052?

MS. MUNN: Absolutely.

DR. MAURO: Good, we've got three.

MS. MUNN: The only reason OTIB-0052 is not on today's agenda was twofold. One I didn't feel like we had room for it. And, two, I didn't have my list in front of me.

DR. ZIEMER (by Telephone): And, Wanda, this is Ziemer. I have to bail out at this point.

I think we're pretty well done now. Is that correct?

MS. MUNN: I believe so. We're just doing housekeeping items, and you know our next meeting --

DR. ZIEMER (by Telephone): We'll meet prior to the next full meeting in the morning then.

MS. MUNN: Yes, yes, you'll get an agenda prior to that time.

DR. ZIEMER (by Telephone): Thank you. I'm signing off.

MS. MUNN: Thank you. Have a good vacation. Bye bye.

MR. MARSCHKE: Wanda, the fourth procedure is OCAS TIB-0011. John got the phone call at lunch time saying that Joyce had reviewed the revised procedure provided by NIOSH, and we are in agreement with the, we have no further comments on it. We are in agreement. We are ready to sign off on those two findings. So those two findings are ready to be, as far as we're concerned, SC&A is concerned, those two findings are ready to be closed.

MS. MUNN: Is the group ready to instruct Steve to go ahead and identify those, OTIB-

0011, as agreed and closed?

MR. MARSCHKE: TIB-0011.

MS. MUNN: TIB-0011, sorry. Any --

DR. MAURO: Could you give us a snapshot --

MR. HINNEFELD: Let me tell you what they are. They're on the, these are, the title is "Lung Dose Conversion Factors for Thoron Working Level ^". The issue was one of the doses based on the progeny to the various regions of the respiratory tract. The original findings, we looked at the original findings and said, oh, gosh, you're right. We didn't do this right. There's an arithmetic error here. So we re-did the arithmetic and submitted, revised the OTIB, ^. Joyce then wanted, was having trouble reproducing the numbers exactly and asked for our calculational files, which we then provided. So that's how we, so Joyce apparently was the phone call there.

DR. MAURO: We got a phone call. Joyce did look at those calculations and confirmed that they're correct.

MR. MARSCHKE: I mean, we don't have to decide it today, but I mean, it's something

that's ripe for decision, if not today then on the 24th I guess.

MS. MUNN: There's no reason why we shouldn't make the decision today. Is there any reason to keep this on the open items list? Is it closed?

MR. HINNEFELD: Sounds closed to me.

DR. MAURO: We recommend closing it. SC&A recommends closing it.

MS. MUNN: Closed resolved.

Any other items, Steve?

MR. MARSCHKE: No, I think I'm done.

MS. MUNN: Good. We'll expect that to appear on the database as closed. And we have scheduled our next meeting for June 24th, 8:30 a.m. in St. Louis, at least three hours, possibly three and a half if we can stretch it.

DR. BRANCHE: I'll work with you to see what other kind of issues come up.

MS. MUNN: We'll see what happens between now and then.

Does anyone want to attempt to go further out than June in placing another meeting for us on the calendar? We know that

one's going to be short. We probably will not get too much accomplished. If we're going to at the end of that meeting start our new process of setting our agenda for the following meeting based on our manipulation of the database, then we are likely to have a fairly significant list to address at our next meeting following that. Any feelings about that?

(no response)

MS. MUNN: I'd like to try to choose a date in July for a meeting.

DR. BRANCHE: My calendar might be ^.

MS. MUNN: What does your calendar look like the second week in July?

DR. BRANCHE: The second full week?

MS. MUNN: Yes.

DR. BRANCHE: Like the week of the 14th?

MS. MUNN: No, the week of the 7th.

DR. BRANCHE: That's when we're supposed to be on the west coast. That's not good for me.

MR. PRESLEY: Right now the week of the 14th would be good for me.

DR. BRANCHE: The week of the 14th would be much better for me.

MS. MUNN: Tuesday, the 15th?

DR. BRANCHE: I haven't heard any, I don't know if your two other Board members are on the line.

MS. MUNN: I don't think so.

MR. MARSCHKE: The Health Physics Site meeting is that week. Paul will probably be at the --

MS. MUNN: That's not good.

DR. BRANCHE: The following week the only day that's a problem is the 22nd. I could do any other date that week. Of course, summer schedules make Friday travel more difficult than any other Friday to be honest.

MR. PRESLEY: How about the 21st?

DR. BRANCHE: I could do the 21st.

MR. PRESLEY: Sunday travel.

DR. BRANCHE: Nine thirty is easy for me to travel the same day.

MS. MUNN: Monday, the 21st, doable?

(no response)

MS. MUNN: Monday, the 21st, face-to-face, 9:30 a.m., Cincinnati.

DR. BRANCHE: Nine-thirty?

MS. MUNN: Yes.

DR. BRANCHE: Until five?

MS. MUNN: Correct.

Anything else for the good of the Order?

(no response)

MS. MUNN: If not, you are released eight minutes early. We are adjourned. Thank you so much. Everyone still on the phone thank you for participating.

(Whereupon, the working group meeting was adjourned at 4:52 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 May 20, 2008; 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 7th day of March, 2009.

_____

STEVEN RAY GREEN, CCR, CVR-CM, PNSC

CERTIFIED MERIT COURT REPORTER

CERTIFICATE NUMBER: A-2102