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

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ADVISORY BOARD ON RADIATION AND
WORKER HEALTH

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SUBCOMMITTEE ON DOSE RECONSTRUCTION REVIEWS

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TUESDAY
JUNE 14, 2016

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The Subcommittee convened via teleconference at 10:30 a.m. Eastern Time, David Kotelchuck, Chairman, presiding.

PRESENT:

DAVID KOTELCHUCK, Chairman
JOSIE BEACH, Member
BRADLEY P. CLAWSON, Member
WANDA I. MUNN, Member
JOHN W. POSTON, SR., Member

ALSO PRESENT:

TED KATZ, Designated Federal Official
KATHY BEHLING, SC&A
ELIZABETH BRACKETT, ORAU Team
NICOLE BRIGGS, SC&A
RON BUCHANAN, SC&A
DOUG FARVER, SC&A
ROSE GOGLIOTTI, SC&A
JENNY LIN, HHS
JOHN MAURO, SC&A
BETH ROLFES, DCAS
MUTTY SHARFI, ORAU Team
SCOTT SIEBERT, ORAU Team
MATT SMITH, ORAU Team
CHERYL SMYZER, ORAU Team
MITCH STEEL
JOHN STIVER, SC&A

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(10:35 a.m.)

Welcome and Roll Call

MR. KATZ: So, welcome, everyone on the line. This is the Advisory Board on Radiation and Worker Health, the Subcommittee on Dose Reconstruction Reviews.

For roll call, this is a Subcommittee meeting, so I'll address conflict of interest. And now we'll address those for the Board Members and myself, because it's easier than having them run through their own. So I believe we'll have everyone that I address on, but we'll see.

So, Josie Beach and Wanda Munn both have conflicts with Hanford dose reconstruction cases.

Dr. Poston, John Poston, has conflicts with X-10, BWXT, ANL, Sandia, LANL and Lawrence Livermore National Lab, Y-12. I think that covers any sites that we might be addressing today.

Dr. Kotelchuck, Dave, has no conflicts.

Dr. Richardson will not be joining us today. I had a note from him, he has a conflict.

So now let's just run through roll call, see what Board Members we have already.

(Roll call.)

MR. KATZ: Okay, and we have a quorum.

MEMBER CLAWSON: Hey, Ted, this is Brad. You forgot, that I didn't hear the INL for me.

MR. KATZ: Oh, I'm sorry. Yes, thank you, Brad. And Brad is conflicted just for INL.

MEMBER CLAWSON: Yes, yes.

MR. KATZ: Thank you, Brad, for catching that. Alright. The agenda for today is posted on the Board section but it's very simple.

We are addressing a host of possible sites, including Oak Ridge facilities, the gaseous diffusion plants, SRS, Hanford, Fernald, Mound, RFP, INL, NTS, maybe some others.

And we had on the agenda adjourning at 5:00 but we need to adjourn at 4:00 for a number of people, including myself who have conflicts at 4:00.

And with that, let me just ask people

to keep their phones muted, oh, and let's go through roll call for the rest of the non-Board Members before we mute your phones.

(Roll call.)

Discussion of Case Reviews Issue

Resolution Sets 14-18

CHAIRMAN KOTELCHUCK: Okay, very good. Welcome, everyone. And we're back in session and returning to our traditional activities of reviewing the Sets 14 through 18.

Let me just first note, before we begin, that we still have one case from Sets 10 through 13, from Hooker, Case 221. And that is being held until there is a meeting of the AWE Work Group, which is going to be held in July. So, just to remind people that we have that one left over.

Now, let's go to -- I'm going to go in the order in your agenda. Let's go to Sets 14 through 18, the file of Sets 14 through 18. And the first one, or the ones that are still left over from the previous meeting, the Oak Ridge Case 394.1. If you would.

Oak Ridge Facilities

MS. GOGLIOTTI: No, I believe that --

CHAIRMAN KOTELCHUCK: Oh, we have 355 first, okay. Good. And there's Finding Number 2. And NIOSH will continue to investigate.

Rose, would you like to -- or whomever -- would you like to discuss this?

MS. GOGLIOTTI: Sure. Has NIOSH had time to investigate this issue?

MR. SIEBERT: We're continuing to work on it.

MR. SMITH: Matt Smith for ORAU Team. We're still taking a look at this to pinpoint the year in the mid-eighties when things switched over to DOELAP for Paducah.

At that point, then, you know, Hp(10) certainly agreed to DCF of choice. DOELAP came into -- you know, hitting different sites online between '86, '87. So we're just trying to pin down the particular year.

CHAIRMAN KOTELCHUCK: Okay. So that's -- we're still holding that in abeyance, in other words, right?

MS. GOGLIOTTI: Well, not in abeyance. That one is still in progress.

CHAIRMAN KOTELCHUCK: In progress, I mean. Okay. Then let's go onto the Oak Ridge Case, as I see it in my notes, Oak Ridge Case 394.1.

MS. GOGLIOTTI: That case we're holding in abeyance.

CHAIRMAN KOTELCHUCK: Okay. And for SC&A and NIOSH review?

MS. GOGLIOTTI: Yes.

Hanford

CHAIRMAN KOTELCHUCK: Okay. Then we should go to -- and from what I can see, we'll go into the SRS Hanford BRS printout. And I believe we start with Hanford 380.2, which indicates that it's open, and yet it looks as if it should be closed. So if we can just go there.

MS. GOGLIOTTI: Okay. One moment here.

CHAIRMAN KOTELCHUCK: 380.2, Hanford.

MS. GOGLIOTTI: This finding is very similar to .1, however, for some reason it was

missing from the original spreadsheet that NIOSH provided us with responses, so it wasn't entered. But when I went to QC to make sure all of our findings were closed this one popped out of it, so --

CHAIRMAN KOTELCHUCK: This is -- so far it's not on the screen for myself and others. So we'll just wait, if we will, one second until it's on there. Here's 380.2.

MS. GOGLIOTTI: Is that showing for everyone?

CHAIRMAN KOTELCHUCK: Alright. Let's see, it's open.

MR. KATZ: Yes, it's showing, Rose.

MS. GOGLIOTTI: Thank you.

CHAIRMAN KOTELCHUCK: It's showing. I have a small notice -- here we go. Here we go, okay. Now, hold it just one moment. Okay. Just in a little different format than we had before. Okay, do go ahead.

MS. GOGLIOTTI: Okay. Well, this is the Hanford Case 380.2. And the finding says that

NIOSH did not include all missed neutron doses. This is very similar to Finding 380.1, which had to do with missed photon doses, but for some reason this one was left off previously. And NIOSH has not responded to this one in particular. However, we could use the 380.1 description that NIOSH provided.

CHAIRMAN KOTELCHUCK: Okay. And the 380.1 was closed. Then it looked to me as if 380.2 should be closed, as well, that we discussed it, did we not, at the last meeting? There it is. It keeps moving.

MR. SIEBERT: Dr. Kotelchuck, this is Scott. I checked the transcript from last meeting and apparently we just skipped right over it.

CHAIRMAN KOTELCHUCK: That's kind of what I thought might be the case, because we'd done a lot of them before and after. But it looked to me that the status was open and it should be closed.

MS. GOGLIOTTI: We have not discussed this finding yet and so we can formally close it out now, if you'd like.

CHAIRMAN KOTELCHUCK: Okay. And the claimant-favorable assumption would be 12 zeros per year. These would not have a significant effect on this dose reconstruction. Any comment from any of the Members of our Subcommittee?

MR. SIEBERT: Well, this is Scott. I do have a little bit more on that.

CHAIRMAN KOTELCHUCK: Okay.

MR. SIEBERT: It is the same as 380.1. It's just neutrons rather than photons. And we use an annual badge, which is what was actually in the records. And we pointed to the TBD, pointing out that there were some people on annual dosimetry, non-rad workers at that time.

So it falls into that. And the other point I would point out is we did change 380.1 to an observation.

CHAIRMAN KOTELCHUCK: Correct.

MR. SIEBERT: Rather than keeping it as a finding. So that would be my suggestion, although I'm not sure if I can make that suggestion.

CHAIRMAN KOTELCHUCK: Well, you can

suggest that we may want to do that. And I think that, in the spirit of the other 380.1, this would be also an observation.

So I'm open. Let me just suggest, then, that we close this and call it an observation. Is there comment on that?

Hearing none, let's just close it out now and turn it to an observation as well.

MS. GOGLIOTTI: Okay.

SRS

CHAIRMAN KOTELCHUCK: Close, on observation. Okay, good. So -- and now let's see, I think we really will start, if I'm not mistaken, on SRS 356.6 in this file.

MS. GOGLIOTTI: Yes.

CHAIRMAN KOTELCHUCK: Okay.

MS. GOGLIOTTI: And this finding states that there was an inconsistent assignment of unmonitored environmental tritium dose. And we had a lot of back and forth here, and at the last meeting NIOSH gave us an additional response here that was pretty lengthy.

And SC&A was tasked with reviewing that. And we did have a chance to look at it. And we do understand what was done, but we believe that we have a disagreement that has to do with interpretation of the TBD on Page 85.

And I think it's a little bit difficult to read here in the BRS so I just pulled up this section in the SRS TBD.

And we interpret this section to mean that when an EE is monitored and has external dosimetry, and there's evidence that there would have been internal exposure as well, to assume unmonitored dose.

But it appears that NIOSH interprets this same text to mean that if the EE is monitored for external and was monitored for a single radionuclide, then all the other radionuclides are not eligible for unmonitored and are instead assigned environmental.

Am I interpreting that correctly?

CHAIRMAN KOTELCHUCK: What do the NIOSH folks say?

MR. SIEBERT: I'm trying to -- just a second, I'm sorry. I'm pulling up the response that we gave on there.

MS. GOGLIOTTI: It's a fairly lengthy response where you break down when you assign fission product dose and when you assign environmental dose.

MR. SIEBERT: Correct.

MS. GOGLIOTTI: Let me see if I can pull it up on my computer here. Keep in mind that the finding has to do with tritium.

MR. SIEBERT: Okay. I'm going to have to -- honestly, I'm going to have to look at your response because I didn't see you put a new response in recently.

MS. GOGLIOTTI: Okay. That's fine. We can hold this for the next meeting, if you'd like.

CHAIRMAN KOTELCHUCK: Would this be for -- this is a more complex one, I know. Should we hold it for the next meeting or might we come back to this after lunch break? Or would you folks from NIOSH prefer a little bit more time?

MR. SIEBERT: I'd prefer to hold it for the next meeting.

CHAIRMAN KOTELCHUCK: Okay. Then we will do that, then. Hold to next meeting.

And this one, I might make mention to our Subcommittee Members, this one is, in my opinion, somewhat more complex. And we will be asked to, if there remains a disagreement, then we will need to make a decision on this.

So I urge people take a look at this for the next meeting. And I'll try to remember to put a note in our next meeting agenda to take particular notice of this.

Okay. Then do we go, I think, 401.4? Is that our next?

MS. GOGLIOTTI: Yes.

CHAIRMAN KOTELCHUCK: Okay.

MS. GOGLIOTTI: And, again, this is an SRS case. The finding states that there was a potential underestimate of missed fission product dose to the prostate.

And here was an instance where they used

the Chooser Workbook and we had some disagreement on how dose should be assigned when they're on multiple organs.

CHAIRMAN KOTELCHUCK: Ah, yes.

MS. GOGLIOTTI: And NIOSH said that this issue had already been discussed in a few previous tabs: Tab 152, 153, and 155. And we did go back and look at that and we did find that the Chooser Workbook had been discussed there, but the discussion had to do with comparing the Chooser Workbook dose to OTIB-54.

MR. SIEBERT: I'm sorry, we keep jumping around. What finding are we on now, just because you're moving so quickly? I need to track down where we are.

CHAIRMAN KOTELCHUCK: 401.4.

MR. SIEBERT: Okay.

CHAIRMAN KOTELCHUCK: SRS.

MR. SIEBERT: Got it.

MS. GOGLIOTTI: Okay. And so we did find that part of the Chooser Workbook had been discussed. But at that time, it was not discussed

how it could be applied to multiple organs, or at least that's not recorded in the transcripts, that I could find.

And at the last meeting you indicated that the Chooser Workbook was not proceduralized, but you did feel that it followed OTIB-60.

So I went back to OTIB-60, Rev 1, and it does state that consistent assumptions should be applied for all cancers when performing the best estimate. However, that revision wasn't in place at the time of this does reconstruction or our review. Actually, Rev 0 was in place.

And on Page 19 of that, it says when information for a particular parameter is unknown or multiple options, the choice that is the most favorable to claimants, i.e., the one most resulting in a largest PoC, should be selected.

And we interpret that to mean that the method that NIOSH is suggesting is appropriate, and we can accept that although it's not documented formally, it's reasonable that, in practice, it's something that NIOSH always does with multiple

cancers.

But we do question whether or not dose reconstructors compare the cumulative impact of each selection of all cancers on the cumulative PoC, rather than just the cumulative dose.

CHAIRMAN KOTELCHUCK: So you are saying that it is proper to use the single nuclide and that one shouldn't use different nuclides?

MS. GOGLIOTTI: You can interpret the OTIB-60 to mean that. It doesn't clearly state that, but you could interpret that.

CHAIRMAN KOTELCHUCK: That we would use a single nuclide, or that the reviewer would use a single nuclide?

MS. GOGLIOTTI: Yes. But we just question, when they're selecting the nuclide, if they compare the cumulative impact.

CHAIRMAN KOTELCHUCK: Right. In other words, the question is whether the single nuclide selected is the best one that gets the largest PoC.

MR. SIEBERT: Right. And this is

Scott. Yes, it's the PoC that we're looking at for the combined cancers. So that is correct.

MS. GOGLIOTTI: It's not the combined dose, it's the combined PoC?

MR. SIEBERT: Correct. Because the dose to one organ can be much larger although it doesn't have as much impact on PoC.

MS. GOGLIOTTI: Correct.

MR. SIEBERT: That's correct.

CHAIRMAN KOTELCHUCK: Okay.

MS. GOGLIOTTI: Obviously, we think that that would be much more consistently applied if it was documented somewhere. Is there any plan to get that documented?

MR. SIEBERT: We can make a note to add that information to OTIB-60.

MS. GOGLIOTTI: Okay. Wonderful.

CHAIRMAN KOTELCHUCK: Okay. Then that seems to be -- there seems to be agreement there.

Is there any comments from any of our Subcommittee Members on this? It seems as if it's

ready for closure with the agreement, unless there are concerns from the Subcommittee, or questions.

MEMBER BEACH: Dave, no questions here. That seems straightforward, and if NIOSH is going to document it, that approach seems good there.

CHAIRMAN KOTELCHUCK: Sounds good to me.

MEMBER CLAWSON: This is Brad. I don't have any questions on it. I think it would be cleaner for us to be able to have the radionuclide that's used.

I was just looking at this from a Work Group standpoint, because we've got some questions on some radionuclides. But this doesn't dive into that, so I'm good with it.

CHAIRMAN KOTELCHUCK: That's good. Okay. Unless further? Hearing nothing further, we will consider this closed. And it will be documented on OTIB-60. Okay. Now --

MEMBER MUNN: This goes into abeyance?

CHAIRMAN KOTELCHUCK: Pardon?

MEMBER MUNN: That puts it into abeyance, correct?

MR. KATZ: Well, I think --

CHAIRMAN KOTELCHUCK: No. I thought that would close it.

MEMBER MUNN: Okay.

CHAIRMAN KOTELCHUCK: Yeah. Now, the next one I have is 403.4.

MS. GOGLIOTTI: Yes. This one, however, we referred to the SRS Work Group, and so --

CHAIRMAN KOTELCHUCK: That's right.

MS. GOGLIOTTI: They haven't met yet. We can skip that for now, I believe.

CHAIRMAN KOTELCHUCK: 403.4. So, right, that is in abeyance. I'll just take that down. Okay. Then I believe that completes this file, right?

MS. GOGLIOTTI: Yes, that's correct.

Fernald-Mound

CHAIRMAN KOTELCHUCK: And so the next file we go to is the Fernald-Mound file, BRS. And

we have the FMPC 373, Observation 1 in progress.

So we begin with Mound Case 346, Observation 1, is that correct?

MS. GOGLIOTTI: Is NIOSH prepared to respond to 373, Observation 1?

MR. SIEBERT: Okay. We're jumping between a lot of different places. Give me a second to catch up here.

CHAIRMAN KOTELCHUCK: Okay. Sure.

MR. SIEBERT: Okay. Now, which one you talking about?

MS. GOGLIOTTI: This is the first one in that matrix: 373, Observation 1.

MR. SIEBERT: Observation 1. Okay. Stu is not on the phone. I know they were looking to it on the NIOSH side. But I'm guessing that Jim probably does not have that information from Stu.

DR. NETON: I do not. And I'm conflicted at Mound -- at Fernald, so I can't comment at any rate.

CHAIRMAN KOTELCHUCK: Right. So then this will just continue on. We'll move ahead. It

will remain in progress.

MEMBER BEACH: Dave, this is Josie. Were we waiting for something from Stu on this? I mean, just clarifying how they were going to write that up? Or is that a different one I'm thinking of?

MS. GOGLIOTTI: With this particular one, the cancer diagnosis rate that was used was different than the one that DOL had specified. And they were going to look into how this had happened.

MEMBER BEACH: Okay. Thanks.

CHAIRMAN KOTELCHUCK: Yeah. Alright. So let's go onto Mound Case 346, Observation 1. Is that the next one?

MS. GOGLIOTTI: Is Nicole on the line?

MS. BRIGGS: Yes.

MS. GOGLIOTTI: Okay. Well, I will let you take the lead.

CHAIRMAN KOTELCHUCK: Okay. Mound 346.

MS. BRIGGS: Yes. Let's see. 346, this is an observation. And this observation has

to do with the labeling of the ICRP 60 correction factors. They were a little confusing because they have been multiplied by the neutron energy fraction. And in the BRS, NIOSH said that they have updated the template to indicate that the ICRP corrections factors are effective, which explains their approach or what was described in that table. So we just recommend closing.

CHAIRMAN KOTELCHUCK: Very good. That seems fine. Any comments or concerns?

MEMBER BEACH: None here, Dave.

CHAIRMAN KOTELCHUCK: Okay. Alright. And hearing no others, we're fine then with that closed. Let me make sure I have -- I'm trying to keep --

MEMBER POSTON: Dave, I'm getting really confused here. Scott's not the only one. I'm looking at a disc that I got that says Mound 346 was closed on the 23rd of April of last year.

MEMBER CLAWSON: It's the next one, John, the 346. Right below it, Observation 1.

MEMBER POSTON: Oh, Observation 1, I'm

sorry. Okay.

CHAIRMAN KOTELCHUCK: Sorry.

MEMBER CLAWSON: No, I had to work through there too, John. That's why I knew it.

MS. GOGLIOTTI: We have to put a finding of no finding when there are no findings, so there's no holes in documentation and we just close those right off the bat.

CHAIRMAN KOTELCHUCK: Good. Now I think we'll begin in sequence, so we won't be jumping around and it will make life a little easier. Administratively, we go to Case 347. And then we have a number of other cases, sequentially, until we finish this file.

So, shall we go to Case 347?

MS. BRIGGS: Sure.

CHAIRMAN KOTELCHUCK: And 347, Observation 1?

MS. BRIGGS: You'll see from the Mound cases that I'm doing, a lot of them are very similar to the Hanford ones that were closed out, I think, at the last meeting. So we probably will be able

to get through these fairly quickly.

CHAIRMAN KOTELCHUCK: Okay.

MS. BRIGGS: Observation 1, let's see. That was concerning -- yes, we've seen this before. This concerns a table that was in the external dose reconstruction guidelines, OCAS-IG-001, which contained two separate tables that were labeled, I guess, 4-1A. One that was on Page 38 and one that was on Page 39. I know we've talked about this before in closing these observations out before.

CHAIRMAN KOTELCHUCK: Yes.

MS. BRIGGS: We just mentioned that this was confusing and needed to be corrected, and NIOSH said they updated the next document and we recommend closure.

CHAIRMAN KOTELCHUCK: Okay. Sounds good.

MS. BRIGGS: Yeah, I think we may see this again in this round, too --

CHAIRMAN KOTELCHUCK: Yes. Okay. So we'll close this, again, unless I hear something. And, fine, let's go to the next one.

MS. BRIGGS: Okay. This is Finding 347.1. This is that same issue regarding the use of rotational and isotropic dose conversion factors for certain cancers that we've seen before and closed out in the last meeting, I believe.

So I'll just briefly explain. NIOSH calculated the recorded photon doses for this case using the DCF for the AP geometry for the lung, but the external dose reconstruction procedures recommend using the rotational or the isotropic.

We just said that could have had an impact on the recorded doses, but we were in agreement that the rotational or the isotropic geometry should have been considered for this instance.

And I think we just recommended closure for that, because I believe NIOSH had agreed that the isotropic or the rotational should have been used. So we recommended closure here.

CHAIRMAN KOTELCHUCK: Okay. Right. So there was agreement. Are there any concerns? Wanda, I know you've been doing a lot of work on

this. Does that sound --

MEMBER MUNN: I think we cleared up most of the major concerns the last time we discussed this. I can't remember whether that was the last meeting or the one preceding. But I think we've pretty well ironed out any differences that NIOSH and SC&A had with respect to rotational geometry.

CHAIRMAN KOTELCHUCK: Good, good. So we should close on this. Any other comments or concerns?

MEMBER MUNN: I think we're ready to close it.

CHAIRMAN KOTELCHUCK: Okay. Then, hearing no further comments, we will consider this closed. Okay. Let's go on.

MS. BRIGGS: Sure. The next one is Finding 347.2. But I noticed on the BRS that it's actually listed as 347.1 again, so there's a repeat.

MS. GOGLIOTTI: I'll get that corrected.

MS. BRIGGS: Yeah, that's just a typo there, but I think this is really 347.2.

CHAIRMAN KOTELCHUCK: Okay.

MS. BRIGGS: This has to do with assignment of missed neutron dose. For this case, missed neutron dose was not assigned because the EE did not appear to be monitored for neutrons.

CHAIRMAN KOTELCHUCK: Right. Could somebody scroll up a little bit? I don't see the discussion on that.

MS. GOGLIOTTI: Okay.

CHAIRMAN KOTELCHUCK: Scroll up just a little bit.

MS. GOGLIOTTI: A little bit more?

CHAIRMAN KOTELCHUCK: Okay, I don't see anything, but if other's do. I seem to be going occasionally in and out of online. Well, do keep going.

MS. GOGLIOTTI: Everyone else?

CHAIRMAN KOTELCHUCK: Everyone else is okay?

MS. BRIGGS: Yeah, I can see that.

CHAIRMAN KOTELCHUCK: Okay, fine. Do keep going, folks.

MS. BRIGGS: Sure. So the DR report for this case says that the column in the records for neutrons is blank and only zero results are -- I'm sorry, only zero results are indicated with zeros.

But the summary data does have a column of zeros for neutrons, which could suggest that the EE was monitored for neutrons. But these dosimeter records appears to be from a more modern database, and they are not the original records from the time that it was done in the 1960s.

So it's really not clear from these records if this individual was in fact monitored for neutrons. So, the original finding, SC&A thought it would be claimant-favorable to include those missed neutron doses in the DR.

So NIOSH stated in the BRS that the quarterly dosimeter records were available for this EE in two SRDB documents, which show that the EE was not monitored for neutrons in 1968 and 1969.

So the missed neutron dose assignment is actually not necessary.

But there were no individual dosimeter records available for 1970, which was the other year that was in question. So in that instance it would have been appropriate to assign missed neutron doses for the four quarters of 1970. It would be a claimant-favorable approach.

So SC&A went back to those reference documents in the SRDB, and they do in fact show that the EE had blank in the neutron column for those years.

So we agreed that this EE was not monitored for neutrons in 1968 and 1969, and therefore it wasn't necessary to assign any missed dose.

But these documents actually weren't in or included in the original DR files at the time that we did the review. We just wanted to make note of that. But for the year of 1970, we both agree that since there are no --

CHAIRMAN KOTELCHUCK: Hello?

MS. BRIGGS: Yes, can you still hear me?

CHAIRMAN KOTELCHUCK: Yes.

MS. BRIGGS: Okay. So for the year 1970, SC&A and NIOSH do agree that, since there are no individual dosimeter records, that the claimant-favorable approach would be to include missed neutron dose for that year. So, SC&A, we recommend closure for this finding.

CHAIRMAN KOTELCHUCK: Right. In other words, that there's agreement between yourself and NIOSH on this.

Okay. Any concerns or questions? Hearing none, let us close it. And let's go on to the next one.

MS. BRIGGS: Okay. The next one is Tab 386. It's Observation 1. Again, this is that same issue regarding Table 4-1A --

CHAIRMAN KOTELCHUCK: Oh, yes.

MS. BRIGGS: -- the External VR Guideline that we just covered a few minutes ago so we just recommended closure since there was a

correction made.

CHAIRMAN KOTELCHUCK: Right. Let's just close it. We've already dealt with that this morning. Okay.

MS. BRIGGS: Yes, we're buzzing along because Finding 386.1, that's similar to Finding 347.1 regarding the rotational geometry for the dose conversion factors.

CHAIRMAN KOTELCHUCK: Okay.

MS. BRIGGS: So if you, I guess you could just close that.

CHAIRMAN KOTELCHUCK: I think we should just close that, again, one moment in case there's any comment.

MEMBER BEACH: I guess I do have a comment, Dave. This is Josie.

CHAIRMAN KOTELCHUCK: Good.

MEMBER BEACH: Wanda mentioned that there was a lot of discussion on this, for both this one and those previous ones we discussed. Is that documented anywhere? You know, I can see that it's not really documented here.

MEMBER MUNN: Oh, yes, on this I believe. I'd have to go back and check and as I said, I can't remember actually when, necessarily. It seemed to me it's been quite a while since we've had much discussion about this but we've certainly talked about it a lot.

MEMBER BEACH: Yes.

MS. GOGLIOTTI: And that discussion happened in the Procedures Subcommittee? Is that correct?

MEMBER BEACH: Yes, Procedures. Okay. I just wasn't sure if we should note something here to those to the effect of that, but.

MS. BEHLING: And Josie, this is Kathy Behling. I know that I had raised a question as to whether this will become a PER in the future and I believe NIOSH has agreed that, when they go in to make all of these changes to the DCS and to the IG-001, this will be one item that will be included in a PER that's going to be, I guess, a very large PER for the IG-001. Can NIOSH confirm that?

MR. SIEBERT: Yes, this is Scott.

Yes, that's going to be part of that PER as part of the ICRP 116 update of the DCS. That is correct.

MS. BEHLING: Yes, because we see this routinely and it's quite obvious that the dose reconstructors aren't always going back to this table.

But I do, you know, I do remember that we have talked about a PER issue which obviously is going to happen.

MR. SIEBERT: I do want to put one clarification on that. Yes, we have been going and doing that for the last couple of years since we've clarified the changes to the DRs. It still will be part of the DER for the historical cases.

MS. BEHLING: Thank you.

CHAIRMAN KOTELCHUCK: Yes, okay. So we shall close it now?

MEMBER MUNN: Yes, I think that's appropriate.

CHAIRMAN KOTELCHUCK: Okay. So we will close. By the way, I am not getting anything on my screen. I'm still stuck on Mound 347.1.

If we're going to continue, I will need to get in sync, either go out and come back or where are other folks on the screen? Are you at 386.2 now?

MEMBER BEACH: I'm following along in the BRS so not sure what --

CHAIRMAN KOTELCHUCK: Yes.

MEMBER MUNN: Well, 386.2 is showing on my screen but it is not showing fully. It's not scrolled appropriately so that I can see the material.

MEMBER BEACH: Yes, I went right to staff tools in the BRS because it's easier for me to be able to --

CHAIRMAN KOTELCHUCK: Right, right. I will, let me see if I can get back. Well, we should go ahead for 386.2. I'm going to just try to get back on, go back on to the Live Meeting link, just reboot on that.

So let's go ahead on 386.2 and I'll, while I'm playing around, you other folks can be, I'll be back with you in a moment. Do keep going

ahead.

MS. BRIGGS: Okay. This is Finding 386.2. It has to do with assignment of internal americium exposure.

For this case the EE was monitored for americium exposure with bioassays and missed dose from americium was assigned in the DR using solubility type M.

In the SC&A finding, they referenced the TBD that recommends that the DR should consider all types of solubility for each radionuclide and then select the type that provides the greatest dose to the lungs.

Also in Attachment A of the TBD it indicates that americium solubility for the building that this EE was working in was type F.

So with this information, SC&A used type S americium in their IMBA calculations and they got a dose of 0.693 REMS. And this dose was greater than the type M americium solubility dose which was about 6 millirem which was used by NIOSH in the DR.

Even though there was a difference, this small increase in dose would have had a small impact on the total assigned dose from the case but SC&A wanted to mention it.

We went back to the document and we agreed with NIOSH's response in the BRS. They quote the TB that says, that cites the paragraph. Well, the guideline reminds the dose reconstructor to use actual case data when sufficient to identify the appropriate solubility type.

And in the BRS, NIOSH states that it is usually the practice to use the solubility that results in the highest dose.

But in this circumstance when the americium is in fact a small part of the plutonium mix, it is appropriate to use type M and not type S.

And they also mentioned that the recommendation's in Attachment A of the Mound TBD may no longer be appropriate and they reference this King document in the BRS.

Let's see. So although the assessment

of type M americium was not consistent with the information in the TBD at the time, NIOSH did provide additional information in their response which explains why the assessment of type M was appropriate for this dose reconstruction. And because of that, SC&A recommends closure.

CHAIRMAN KOTELCHUCK: Okay. Do folks have comment? I'm still trying to play around to get back on to Live Meeting. So if others would comment.

MEMBER MUNN: The explanation should be quite adequate and appropriate and there's the recommendation I suggested here.

CHAIRMAN KOTELCHUCK: Okay.

MR. SIEBERT: This is Scott. The question I would have is whether this should be an observation rather than a finding, because I agree there were conflicting documents but there was still overriding documentation such as OTIB-60 on how to handle americium, which is what the dose reconstructor actually used correctly.

MS. GOGLIOTTI: Was that properly

cited in the dose reconstruction so that we could follow what was done?

MR. SIEBERT: OTIB-60, I can't tell you off the top of my head if it was but I can't imagine why it wouldn't have been because it's referenced in almost every dose reconstruction. I can go back and verify that though.

CHAIRMAN KOTELCHUCK: Okay. Well, I'm back but do continue, folks.

MEMBER MUNN: That's --

CHAIRMAN KOTELCHUCK: Sounds like we're ready for closure or do you want to check that and come back to us?

MR. SIEBERT: Let me check it and I'll come back and check it.

CHAIRMAN KOTELCHUCK: Okay.

MEMBER MUNN: That would be helpful.

CHAIRMAN KOTELCHUCK: Okay. Should we continue on then to the next one or just wait a moment?

MR. SIEBERT: Yes, I can do that. That's no problem.

MEMBER MUNN: Yes, let's do.

CHAIRMAN KOTELCHUCK: Okay. Good.

MS. BRIGGS: I believe that finishes up Mound.

CHAIRMAN KOTELCHUCK: Okay.

MS. GOGLIOTTI: That's great. Thank you, Nicole. Is Ron on the line?

DR. BUCHANAN: Yes, I'm here.

MS. GOGLIOTTI: Great.

CHAIRMAN KOTELCHUCK: Okay. Now --

MS. BEHLING: This is Kathy Behling. Before we continue, can I just make a comment on the last finding, the 386.2? I believe, I mean, our response to this particular finding is that type M is not, using type M americium is not consistent with information in the TBD at this time.

And again, we've got to go back to what is the hierarchy of data here? Generally you will use a TBD to make a decision as to how to handle these types of issues. And even though OTIB-60 maybe states something different, I'm in

disagreement with making this an observation because I think it was appropriate for us to look at the TBD and use the information that was available in the TBD at that time.

MEMBER MUNN: Yes, thank you for articulating that, Kathy. I was kind of dragging my feet about jumping on that too because it seemed like I was trying to evaluate whether it was from our distant viewpoint still of legitimate findings because might that raise the question.

I'm a little foreign on that one. It seems to me that there's some merit to the concept of it actually being legitimate in the findings.

MS. BEHLING: We understand now why NIOSH made the decision but I don't think it was inappropriate for us to question this especially since we were following information that was provided in the TBD, that was my --

MR. KATZ: I mean, I think, Kathy, I think that's correct that it's not inappropriate for you to question it. But the issue about observation versus finding to use different

terminology whether there's a defect or not and there's no defect in the DR.

It's an issue of whether the documentation is all clear and easy to follow sort of in effect, what you're saying.

You know, and that normally falls in the observation camp because there's no defect in what they did for this person, dose reconstruction.

MS. BEHLING: Well, there's an inconsistency between the TBD and perhaps what is stated in OTIB-60.

MR. KATZ: No, I understand, there's a, again, there's a how do you interpret the documentation since there's different documentation being applied.

But again the dose reconstruction was done correctly. This person was not mistreated in terms of the dose reconstruction. The dose reconstruction was conducted correctly. There's no defect in the dose reconstruction.

CHAIRMAN KOTELCHUCK: Other Members of the Subcommittee want to weigh in?

MEMBER CLAWSON: This is Brad. I was just trying to understand the difference between the S and the M is to, was there any difference in the dose in those two?

MEMBER MUNN: Well, yes but that's not the real question.

MEMBER CLAWSON: Okay. What's the question then?

MEMBER MUNN: Well, the real question is what we're debating right now, is whether this is directly an observation or a finding.

MEMBER CLAWSON: Yes, and I understand that but was the proper type used? It sounds like kind of from what I'm getting that it was not but at that time that it was. And what I'm trying to get my hands around is, was the proper type used at the very beginning or not?

MR. SIEBERT: This is Scott. What happened here is, my understanding is the americium is not linked in with a plutonium intake at Mound.

So the only time it is appropriate to assign americium type S is when it is locked into

a plutonium matrix along with type S plutonium, as basically a part of that mixture.

When it is considered on its own as it was in this assessment it is always assumed to be type M. And all of our documentation, OTIB-60 and so on, we've always dealt with it in that manner on this project.

The issue is that the Mound TBD did not specify that information accurately in that attachment. It used a reference from the site that was inappropriate and said that type S americium all by itself was an acceptable type of material to be exposed to, which it clearly is not unless it's part of a plutonium mixture.

So it is an inconsistency with the methods on how we deal with americium as part of a mixture and americium on its own as we handle it in all project documents versus what Attachment A of the Mound TBD was saying at the time.

And we went with the process which we've known for a long time until the TBD got updated, that type S americium is only assignable along with

a plutonium mixture.

MEMBER CLAWSON: Well, that was a mouthful.

MR. SIEBERT: It sure felt like that as I was going along.

CHAIRMAN KOTELCHUCK: Yes, this is a complex case in terms of the decision.

MS. GOGLIOTTI: Now, is the OTIB-60 revision that was used, is that more current or was it published before or after the TBD?

MR. SIEBERT: I'm looking at it right now and OTIB-60, the revision, it was available in 2007 which is two, three years before this claim was done.

CHAIRMAN KOTELCHUCK: Yes.

MR. SIEBERT: But prior, I'm going to tell you, even prior to us having OTIB-60 documenting this fact, we've known this issue for pretty much since the beginning of the project and we were waiting, once again we waited for documentation sometimes to catch up with the state of knowledge of how can we do claims appropriately.

But the bottom line is, type M americium is the appropriate type to assign. And we agree that Appendix A or Attachment A of the TBD was inappropriate and that's why we updated it later to remove that information.

Now if we don't want to make that an observation that's your guys' call. I was just pointing that out.

DR. NETON: This is Jim. There is no type S americium, per se. I mean, it doesn't exist. If you look in the ICRP it will tell you americium is type M.

But it only, it would exist as Scott said as a type S if it were embedded in a plutonium matrix that was type S and would behave like the plutonium matrix, not as its own entity.

I think that's pretty well established in the health physics world that that's the way it works.

MR. KATZ: Right. So let me just speak to again when you think about roll ups. When we do these roll ups for the Secretary like the one

we're almost finished with now, we've finished with actually all the cases for that.

I mean, you're telling the Secretary, you know, what percentage of cases had defects and this is not a case with defects. Or this is not a defect.

So you don't want this number as a defect. And what seriousness are you going to put to a defect that's not a defect? And you don't want that as part of your roll up.

So I don't think you can determine a finding because that messes up all of your accuracy of all of your numbers that you're telling the Secretary in terms of your review.

CHAIRMAN KOTELCHUCK: I'm going back and forth on this in thinking as folks are talking, but I'm beginning to lean toward an observation because the folks at NIOSH did the correct thing when, did the correct procedure based on the information available at the time even though they knew change was coming.

And so I'm sort of getting, moving into

the observation camp. What about other people on the line that, John, you're on the line. You haven't said anything. What's your thinking?

MEMBER POSTON: I'm caught in between. I understand exactly why they did what they did because as Jim pointed out, when it's mixed with plutonium it's really held up by the plutonium.

CHAIRMAN KOTELCHUCK: Yes.

MEMBER POSTON: But I don't know. To me it's not a, I just can't see that it has the significance of a finding necessarily because I think that dose estimates were more than likely very, very correct.

CHAIRMAN KOTELCHUCK: Yes, yes.

MEMBER POSTON: I mean, I think we're spending a lot of time on something that's not really that big a deal but --

CHAIRMAN KOTELCHUCK: I would agree with you that it's not a big deal but I think our different agencies that are working, that is to say, the NIOSH folks and the SC&A, yes, it's important to them to, if you will, properly credit

them or properly assign it for them.

MEMBER POSTON: Well, no doubt, no doubt, if there's a difference of opinion --

CHAIRMAN KOTELCHUCK: Right.

MEMBER POSTON: -- then that should be expressed. I don't know exactly how we weight the seriousness of a finding or what, as Ted says, when you forward it to the Secretary, is it --

CHAIRMAN KOTELCHUCK: Yes.

MEMBER POSTON: To me it's like almost finding that, finding fault in what they did because, and saying it was done incorrectly.

CHAIRMAN KOTELCHUCK: Yes, well, that's true. I mean, that's, the finding has that implication. But well, actually, let me ask --

MEMBER CLAWSON: Dave, I think, this is Brad, I think we ought to put it as an observation. You know, we can go around and around about this.

CHAIRMAN KOTELCHUCK: Yes.

MEMBER CLAWSON: But myself, I think this is an observation and I'm glad that SC&A brought this up and so we could kind of look at this.

But it also gives us good basis to know what is being changed and done to be able to correct this too.

CHAIRMAN KOTELCHUCK: Well --

MEMBER POSTON: I agree with Brad.

CHAIRMAN KOTELCHUCK: Yes. I think we're moving, I think the majority opinion is moving to observation and I very much agree with John that we have to assess whether the value of spending the time of a Subcommittee meeting, which is precious, if you will, also on this.

And let's just understand that this is one of those borderline calls. I'm going to move that we make it an observation and I would ask, would people like to have a vote, or?

MEMBER MUNN: I don't think that's necessary.

CHAIRMAN KOTELCHUCK: Okay.

MEMBER POSTON: I agree, no.

CHAIRMAN KOTELCHUCK: Alright. Then I think we've all spoken and let's call it an observation and move on.

MEMBER MUNN: Done.

CHAIRMAN KOTELCHUCK: Okay. Let's go further. It's 11:30 now. We have another half an hour until we make our lunch slash breakfast break.

What is the next one after 386.2?

Rocky Flats

DR. BUCHANAN: Okay. This is Rocky Flats.

CHAIRMAN KOTELCHUCK: I mean, 353, no, hold it.

MS. GOGLIOTTI: Yes, 353.

CHAIRMAN KOTELCHUCK: Yes, 353, excuse me. Go right ahead, Ron.

DR. BUCHANAN: Yes. This is Ron. Yes, our next one's Rocky Flat, 353 Observation Number 1.

We have five tabs on this one with several observations in Rocky Flats. We have about five tabs and we have several observations and findings.

And the first one was 353, Observation Number 1. And in this case the records show that the worker did not work in '87, I mean, on the CATI

report Scott said did not include '87.

So we questioned why NIOSH assigns a dose for 1987, and they explained that in the file that showed a 1987 dosimetry readout and so they assigned it for 1987.

And we looked at this and found out, we looked at documentation and found that that was true. There was a zero result recorded in 1987.

And so we agree that this was correct to assign that missed dose and NIOSH cleared the finding and SC&A observation so we suggested closing it.

CHAIRMAN KOTELCHUCK: Okay. Sounds good. Comments or concerns?

MEMBER CLAWSON: This is Brad. I have none.

CHAIRMAN KOTELCHUCK: Okay. Then let's close this, folks.

MEMBER CLAWSON: Looks good.

MEMBER BEACH: Agreed.

CHAIRMAN KOTELCHUCK: Okay. Fine. Closed. Let's go on.

DR. BUCHANAN: Okay. We have Observation Number 2, the same case. And we're going to see this issue come up twice in this one and the next tab.

CHAIRMAN KOTELCHUCK: Yes.

DR. BUCHANAN: We find out that the term non-penetrating wasn't defined, this is more TBD, Rocky Flat TBD issue.

Non-penetrating wasn't really defined. It was used in the DR. And this doesn't sound like a big deal but it is for Rocky Flats because they changed dosimetry systems a number of times and so non-penetrating had different, you calculated non-penetrating radiation doses differently for

different periods.

And so we would've liked to seen this defined and suggest that we put in the TBD and NIOSH agreed that non-penetrating should be defined as each time for each time period and so did that would perhaps appear in the next revision of the Rocky Flat TBD. And we agree and suggest closure on that.

CHAIRMAN KOTELCHUCK: Yes. Okay. That sounds --

MEMBER POSTON: I have a question.

CHAIRMAN KOTELCHUCK: Yes, question?

MEMBER POSTON: Is this, does this definition change as a function of energy or is it a function of using film versus TLD versus OSL?

DR. BUCHANAN: It's the way they read the dosimeters and recorded them but they included in non-penetrate, or they included shallow, neutron and deep or it's just the shallow and gamma. It was the way they kept the records, mainly, and read the dosimetries. And that changed over a period of each, a period of time it would change.

MEMBER MUNN: Oh, procedural changes apparently.

CHAIRMAN KOTELCHUCK: Yes. Okay. Sounds like we could close this. Okay. Let's go on.

DR. BUCHANAN: Okay. The first finding was 353.1 and that was that the table made it the wrong neutron dose, energy rate, the IREP table, IREP table, used the wrong energy range and neutron category.

And so NIOSH checked this out and find out that the Crystal Ball version used at that time assigned miscoded neutron energy in the IREP table and that has since been corrected.

And it was claimant-favorable, however, but it used, instead of using the right one using dose conversion factors slightly greater, and so it was claimant-favorable and since then the error has been corrected and that older version is no longer used and we agree that claimant-favorable is a QA error and recommend closure.

CHAIRMAN KOTELCHUCK: Yes. Okay. That sounds like a proper handling of that.

MEMBER MUNN: We can close.

CHAIRMAN KOTELCHUCK: Okay. Let's close, folks. Good, we will close it. Okay. 354.

DR. BUCHANAN: 354, Observation 1. The same issue about non-penetrating definition. And again the same discussion. NIOSH agrees that they should be defined in the TBD as it applies to each period of dosimeter records. We agree and recommend closure.

CHAIRMAN KOTELCHUCK: Right. Let me ask you. How is this different than the previous --

DR. BUCHANAN: Observation.

CHAIRMAN KOTELCHUCK: Oh, this is Observation 1, excuse me, excuse me. This is not the same case.

DR. BUCHANAN: Correct.

CHAIRMAN KOTELCHUCK: Right. Okay. That sounds like it should be closed unless I hear

concerns.

MEMBER BEACH: No concerns here, Dave.

CHAIRMAN KOTELCHUCK: Okay. Let's call it closed.

Thanks. Okay. Let's go to the next one. Was there any finding? Yes.

DR. BUCHANAN: Yes, we had one finding here. 354.1 is the shallow dose, whether we find shallow dose with, if the neutron dose out or not. And the workbook was correct that they used. However, the TBD stated it wrong so when we did the dose reconstruction review, we did not find that the dose reconstruction followed the TBD and so we flagged that as an error.

Looking at the workbook, the workbook did do it correctly so the correct dose was assigned. And so the TBD needs to be changed to match the workbook. And so that's what the status of that is.

CHAIRMAN KOTELCHUCK: Okay. That sounds reasonable. And NIOSH agreed?

DR. BUCHANAN: Okay. My screen's not

showing any progress.

CHAIRMAN KOTELCHUCK: Right. Okay. That should be SC&A recommends closure. NIOSH is onboard with that, sounds like, should be closed.

DR. BUCHANAN: Yes.

CHAIRMAN KOTELCHUCK: Okay.

MR. KATZ: Someone still has a speaker phone open and this echoing is really awful.

MEMBER MUNN: Yes, it seems to be getting worse instead of better.

CHAIRMAN KOTELCHUCK: Could my phone be acting up? I don't have anything else going on and I'm not speaking. I don't, now I hear stuff in the background. I hear, excuse me, noise in the background. I don't believe it's from me, but.

MEMBER CLAWSON: So are you on a speaker phone, Dave?

CHAIRMAN KOTELCHUCK: No, I am not. No, I am not.

MEMBER CLAWSON: Okay.

MR. KATZ: So someone else on the line, you have a, someone that has a speaker phone open,

this is the only way we get this reverb.

CHAIRMAN KOTELCHUCK: Right. And I'm sure it's inadvertent but people should double-check that they may have it on speaker. That sounds better. Nope. Nope, nope.

MS. GOGLIOTTI: If you don't have a mute button, you can push *6 and that'll mute your lines for us.

MR. KATZ: Right. Everyone except for the person talking should have their phone muted anyway.

CHAIRMAN KOTELCHUCK: How are we now?

MR. KATZ: That sounds better.

CHAIRMAN KOTELCHUCK: That sounds better. Okay. We just finished 354.1. We're on 354.2.

DR. BUCHANAN: Yes, that was a dose, again it was a dose --

CHAIRMAN KOTELCHUCK: There it is.

DR. BUCHANAN: - conversion factor. And this was a, it was corrected in the workbook. They assigned the wrong energy range dose

conversion factor. This has been corrected in the workbook. It was claimant-favorable so it did not impact the outcome of the case and this has been corrected and so it was a QA issue and we recommend closure.

CHAIRMAN KOTELCHUCK: Okay. Again, that sounds reasonable. We can, I think work through this echo for a few minutes and then we're going to be breaking and I hope when we come back all will be well. I don't want to spend more time on this, so let's close it. Do go ahead.

DR. BUCHANAN: Okay. We're on 428, Observation 1.

CHAIRMAN KOTELCHUCK: Yes.

DR. BUCHANAN: And this says that Procedure 60 did not reflect what was in the Rocky Flats TBD revision at the time the dose reconstruction was performed.

And NIOSH agrees that Procedure 60 needs updated to match the TBD, and so we have no further issue on that. And we both agree Procedure 60 needs to be updated and recommend closure.

CHAIRMAN KOTELCHUCK: Okay. Again, sounds okay. Unless I hear anything and we'll move ahead. 428.1.

DR. BUCHANAN: Okay. This is the opposite issue in that the TBD lists the lumbar spine doses differently than OTIB 6. And so in this case the TBD needs to be issued, updated to match the updated OTIB 6.

CHAIRMAN KOTELCHUCK: Yes.

DR. BUCHANAN: We agree with that and recommend closure.

CHAIRMAN KOTELCHUCK: Okay. And yes, right. Okay. Any comments or concerns by our Subcommittee Members?

MEMBER MUNN: No. Do it.

CHAIRMAN KOTELCHUCK: Okay. Done. 428.2.

DR. BUCHANAN: Okay. This is an older issue. These were done a while back. And so this was a, 428.2 is about the intake, some of these values recommending a TBD change with the function in years for the uranium intake.

And it looked like in the chronic manual dose workbook, dose reconstruction tool that accompanied the file that they used the first value and didn't change it.

It was pointed out by NIOSH that it appears that way in the summary when you open up the CADW Report. But if you look down following that it is broken down into different years and that the top lines are only the summary of total dose for those different intakes.

And so we have addressed this before. SC&A is now aware of where they do the actual breakdown and we agree that it was done properly and recommend closure.

CHAIRMAN KOTELCHUCK: Okay. And that sounds perfectly reasonable for closure unless I hear further comment.

MR. SIEBERT: Well, this is Scott. I'd point out that's probably an observation in that we did it correctly.

CHAIRMAN KOTELCHUCK: Okay. The correct values were used in the assessment?

DR. BUCHANAN: Yes.

CHAIRMAN KOTELCHUCK: I think that qualifies as a finding, excuse me, as an observation if the correct values were used.

MS. GOGLIOTTI: And we can accept that.

CHAIRMAN KOTELCHUCK: Okay. Then let's close it as an observation. Okay. Let's go on.

DR. BUCHANAN: Okay. So next one is 419.

CHAIRMAN KOTELCHUCK: Yes.

DR. BUCHANAN: Okay. And this is a worker that worked at a number of places and the finding concerned here was Rocky Flats place.

And our first Finding Number 1 was the assignment of doses or photon energy. The percentage rate was 75, 25, or 50, 50, the energy of the photon assignment.

CHAIRMAN KOTELCHUCK: Right.

DR. BUCHANAN: What we find out was that it was, the correct energy was used in IREP however the DR report used one range and then IREP

actually assigned it correctly using another range. And so it was a quality issue in the text of the DR Report.

CHAIRMAN KOTELCHUCK: Yes. Could you go over that again also please speak up a little bit. Could you please, I'm a little bit unclear that the energy distribution should have been 75, 25 and that IREP, 50, 50 was put in and IREP made it 75, 25, is that correct?

DR. BUCHANAN: Let's see.

CHAIRMAN KOTELCHUCK: Or do I have it --

DR. BUCHANAN: IREP used 75, 25. Dose reconstruction report used, stated 50, 50.

MEMBER BEACH: So this is where he worked, is that what the issue is?

DR. BUCHANAN: No, the issue is that the IREP used one energy range in the dose reconstruction. The IREP used a different one. The dose reconstruction states one and the IREP used a different one.

We don't necessarily agree with that.

We've had some debate on that but that wasn't the issue. The issue was it was different from what the dose reconstruction report stated in the text.

MR. KATZ: So it's just an error in the narrative in the dose reconstruction, is what you're saying?

DR. BUCHANAN: Yes.

CHAIRMAN KOTELCHUCK: Yes. And the calculation was done properly?

DR. BUCHANAN: According to the way NIOSH wanted to assign the dose, yes, the energy.

CHAIRMAN KOTELCHUCK: Right. So that seems again to be an observation. Right. Using our standards. So can we close it as an observation? Does anybody have a concern?

MS. GOGLIOTTI: Ron, do you agree with the assignment of 50, 50?

DR. BUCHANAN: Well, I didn't do this case so I didn't go back and look at all the data on it. But it appears to be somewhat, you know, a matter of choice.

You know, there didn't seem to be a

definite indication which one should be used, although we would've probably used the other range as stated in the DR. Either one could have been selected.

CHAIRMAN KOTELCHUCK: In this case the process through which we went corrected what the person said in the report, right? I mean, they recorded 50, 50 and the program corrected it?

MR. KATZ: Well, Dave, it's not the program. I mean, someone's inputting that data in the IREP, right?

CHAIRMAN KOTELCHUCK: Oh, and it's input of that data itself, okay. Alright, I see.

MR. KATZ: The input was correct but what they said in their dose reconstruction narrative, they put the wrong ratio in.

CHAIRMAN KOTELCHUCK: Got it, got it. Okay. So what do people say? Observation?

MS. GOGLIOTTI: Well, if we follow the same logic that we've been using previously then this would follow as an observation.

MEMBER CLAWSON: Rose, I couldn't hear

you, Rose.

MS. GOGLIOTTI: If we follow the same logic that we assigned at the last meeting where if there was an error in the dose reconstruction report that didn't impact the actual dose reconstruction, so the dose reconstruction report said the wrong thing but they did it correctly, at the last meeting you indicated that you wanted those observations.

CHAIRMAN KOTELCHUCK: Yes.

MEMBER CLAWSON: I agree with that.

CHAIRMAN KOTELCHUCK: Okay.

MS. GOGLIOTTI: Now Dave, if I can speak for one second.

CHAIRMAN KOTELCHUCK: Sure.

MS. GOGLIOTTI: Historically we've always tracked QA findings as issues such as this where there was a problem in the dose reconstruction report. But we're now dropping these all down to observations so these would all fall out of that category.

Do you want me to expand that to now

include QA observations as well? This has to do with reporting for the next Secretary letter.

CHAIRMAN KOTELCHUCK: Right, right.

MS. GOGLIOTTI: Because I'm concerned that we're losing all of these QA issues when you're dropping them down to observations versus findings.

MEMBER MUNN: That's a valid concern. It's a truly valid concern.

CHAIRMAN KOTELCHUCK: Yes.

MEMBER MUNN: I'm a little concerned about changing our view of these things. It's really, well, if I were a cartoon character I would have a large balloon over my head right now that says, hmm.

Because there's more to be concerned with here than just simply our metrics that are going to the Secretary. But again, we're time-constrained and how much time you're going to devote to deliberating which is sometimes what we're debating.

CHAIRMAN KOTELCHUCK: Well, I think

that when we finish the last report, we're trying to start the next report with a bit more clarity than we had in the previous one and I know that I, as a Member of the Subcommittee, was not very clear in my own mind about observation versus finding.

And I think we've tried to correct it and adjust it so I don't mind changing but now we're changing for a new report and I'm, I think our definition is reasonable, I guess, and even though it does make for some changes in the array of finding versus, in the distribution of findings versus observations. Other comments?

MEMBER MUNN: The problem though still focuses around losing all our, are we going to lose all of our QA commentary because we're putting them under observations? That's a real concern so because one of the things we really and truly wanted to be able to save.

CHAIRMAN KOTELCHUCK: Yes, yes.

MR. KATZ: Wanda, I mean, when you have a QA issue that affects dose, that's still going to be captured. What you're losing here is what

we're calling a QA issue in how well the narrative, how correct the narrative in the dose reconstruction is.

And that technical narrative is really, has only one audience which is the auditors, the dose reconstruction people themselves, whether it's the folks at NIOSH and the auditors, but certainly the worker receiving the dose reconstruction, these narratives on these details are meaningless.

MS. GOGLIOTTI: Well, to the claimant though, when a claimant sees their report, if it says one thing and the claimant agrees with that and something different was done, the claimant doesn't have an outlet to --

MR. KATZ: Well, I mean what I'm saying, Rose, is that a claimant, whether it's 50, 50 or 25, 75, that's all meaningless to the claimant.

MS. GOGLIOTTI: I agree but in it they select, the reason that it's selected is based on their work location. So if the claimant sees I

worked in this and they assigned this because of that and something different was actually done and assumed, then the claimant doesn't have an outlet to use to correct that because they don't know an error had occurred.

MR. KATZ: Well again, the claimant is in the position to do that in the first place, but.

MEMBER CLAWSON: Well, since we're all going to our feeling about it, myself, I am interested especially being on this committee this long, we have, I know it may be just an observation but I kind of like to see the ones that are QA issue because we've worked very hard to be able to, and I know NIOSH has been and everybody else, to be able to take care of these QA issues. Myself, I'd still like to see even though it is an observation, is the QA observations.

CHAIRMAN KOTELCHUCK: Is that something that we could do or could record?

MS. GOGLIOTTI: I can easily record QA observations and QA findings. I could total them but if I'm not tracking them now then it's going

to be a lot harder to go back and do it versus doing it --

CHAIRMAN KOTELCHUCK: Right. But we are now, right, we are now in the beginning of the new set of the 14 through 18, I mean, and therefore the new report. So we can make changes now and this is the time.

MEMBER POSTON: Well, to me this is sort of like keeping a batting average we sort of need to, it's a --

CHAIRMAN KOTELCHUCK: Go ahead, John.

MEMBER POSTON: Well, it's an indication of what's going on. And I think if we had a lot of QA issues then it would tell us what we need to follow up on these, so it's an indication of the quality in the work.

So if we have a low QA issue then that's an indication it's good. So if we don't have that information it's like having a baseball player want $10,000,000 and he's got no batting average because he didn't keep up with it or nobody kept up with it.

CHAIRMAN KOTELCHUCK: Well, I mean we can, I think we can, at this point we have not done that many of Set 14, that we can go back and assign for the observation QA or not QA, or just --

MEMBER CLAWSON: I would really like to see that. This is just Brad.

CHAIRMAN KOTELCHUCK: Sure.

MEMBER CLAWSON: You know, I like what Rose had to say about this. And John, you're correct. I'd just like to, it'd just give us, well, it just gives me a better idea of what we're actually dealing with in here, what we have seen.

And the observation and stuff we've come up to a pretty good line of that. But still if Rose could track her stuff I would, myself, still like to be able to see it because the difference between a QA issue and observation and just another observation, I'm --

CHAIRMAN KOTELCHUCK: Well, that sounds good. I mean, we don't want to lose information. We want to gather as much information as we can in a responsible way that

doesn't tie us up in knots.

And Rose, if you think it's not a big, if you think that we can look at the observations, the ones that have been done in Set 14 now and really just make a notation for those that are QA.

MS. GOGLIOTTI: I can absolutely do that and with very minimal effort, so.

CHAIRMAN KOTELCHUCK: That sounds very good. And my feeling is that that would be a proper procedure. I want to make sure other Committee Members come in on this because this is an important decision actually.

MEMBER MUNN: Well, I have one more thing to say about that.

CHAIRMAN KOTELCHUCK: Good.

MEMBER MUNN: Conversely, conversely, if we are in a position where we're pulling things to at the issues that are not specifically an error of some sort, then the casual observer reading the metrics later is going to get a mistaken notion of what has been assigned.

And therefore we're going to have to be

very conscious about what we call a QA issue if we're going to track them in this particular manner.

We'll have to be very cautious of that, I think. Because to the rest of the world out there I agree that a QA issue is going to be determined as being essentially in most cases a personnel failure issue. And this is not necessarily true in many of these cases. We're kind of blithe about some of these QA issues.

CHAIRMAN KOTELCHUCK: Yes.

MEMBER MUNN: Several of them I very much dislike having us transmit information that could be that easily misconstrued by the casual reader.

CHAIRMAN KOTELCHUCK: Yes. The question is who sees, to whom do we report about the extent of the QA and that seems to me it's the Secretary and implicitly the Agency, DHHS. That's not --

MEMBER MUNN: My point is being very clear about the definition of what we're calling

a QA finding.

CHAIRMAN KOTELCHUCK: Yes.

MEMBER MUNN: That's my point.

MR. KATZ: Right. So, Wanda, so I mean the way we've just discussed it, these observations relating to how clear or correct the documentation is versus the actual dose reconstruction, where there are QA issues we would be able to sum up, you know, how frequently our dose reconstruction report is accurately written up. That's what we're saying here.

And we'll be able to tell people fact from -- based on this audit. So it's clearer than it was before for sure because now we're characterizing it as an observation.

It wasn't a problem with the dose that someone received. It's just a problem with what was said to them together with their dose.

So I don't know, I think this a degree clearer than it was before in all the previous reports which seems to me an improvement.

CHAIRMAN KOTELCHUCK: Yes. Let me make

a suggestion. It's now 12:01 East Coast time. I think we could all benefit from having a bite to eat and relax for a few moments and then let's come back to this when we resume at one o'clock and see how we feel.

MEMBER MUNN: Okay.

CHAIRMAN KOTELCHUCK: Okay. Very good, folks. See you all at one o'clock and we will resume this discussion, and think a little bit more over our meals about how we feel. Okay. Thank you, all.

(Whereupon, the above-entitled matter went off the record at 12:02 p.m. and resumed at 1:02 p.m.)

Remaining Cases and Discussion

CHAIRMAN KOTELCHUCK: Okay. To Wanda, I was just wondering, I was thinking the concern is that this adding the QA to the observations may be misinterpreted, and I do understand that.

On the other hand, thinking about it over lunch, if we gather more information, we can

always choose at a later date not to use it in the report for the Secretary if we think it really does lend itself to misinterpretation, but if we don't gather the data then we don't have it.

We can, of course, at the very end go back and go over everything, but that's a huge job, whereas collecting more information now will give us information that we cannot use if it's not, if it is open to misinterpretation.

So I'm kind of thinking that we should do it. We should just put QA in under observation as well as under findings.

MEMBER MUNN: Well, I don't --

MR. KATZ: And I can just add to your note, Dave, if you are going to report to the Secretary about QA, the matter of whether, you know, the reports, the descriptions in the reports are written well, I mean that you're going to write clearly and simply anyway.

So I don't think in real circumstances when you report to the Secretary, if it's a report on that matter, it's very easy to describe what you

are saying.

CHAIRMAN KOTELCHUCK: Yes.

MR. KATZ: So, yes.

MEMBER MUNN: Well let me clarify one thing for myself. I have no objection, quite to the contrary, I was one of those that in the early days requested that we seriously consider and incorporate the concept of a QA designation for our record keeping and we did that early, early on.

How we came to not be doing it in quite the same way I don't even recall, but I certainly am not averse to the idea of classifying the issues as QA issues.

My only concern, my only concern is that it not be misinterpreted by the reader when we decide to do the kinds of decisions we've been making today.

I think they are appropriate, but by the same token we make two kinds of quality decisions. What we are making here is a difference between, for example, manual copying incorrectly, typos, misnumbering of tables, you know, using the wrong

citations.

But that's an entirely different thing than a well-intentioned and very careful reviewer calling attention to something that they might have a question about that just simply did not appear obvious to them.

CHAIRMAN KOTELCHUCK: Yes.

MEMBER MUNN: And that's my only concern. But, no, please don't mistake my comment as being either wanting to hold up the train or being averse to the idea of having a QA classification in our activities here.

I think it's not only appropriate, but necessary, but I was simply calling attention to the fact that there is more than one type of issue going into this --

CHAIRMAN KOTELCHUCK: That's true.

MEMBER MUNN: -- and just looking at numbers after the fact --

CHAIRMAN KOTELCHUCK: Yes.

MEMBER MUNN: That's my only concern.

CHAIRMAN KOTELCHUCK: Okay. Well how

about other Subcommittee Members, what's your -- how are you thinking, what are you thinking now?

MEMBER BEACH: I agree with what Wanda said. I do believe that there is a difference between them, but I also believe we should track them moving forward.

CHAIRMAN KOTELCHUCK: Yes.

MEMBER CLAWSON: This is Brad. You already know my opinion. I think that we should be tracking it and I think myself personally, it will be self-explanatory because there is a difference between QA issues and knowing these observations.

But I think it gives us more information to be able to understand what's going on, so I'm good with it.

CHAIRMAN KOTELCHUCK: Yes. John?

(No response.)

CHAIRMAN KOTELCHUCK: John I think is going off mute.

MEMBER POSTON: Can you hear me?

CHAIRMAN KOTELCHUCK: Yes, we can.

MEMBER POSTON: Okay. Sorry, I was going the wrong way.

CHAIRMAN KOTELCHUCK: Aha.

MEMBER POSTON: But I don't have anything substantial to add. I just thought the idea of keeping score was something that we probably needed to do.

CHAIRMAN KOTELCHUCK: Okay. Well it sounds like the majority of us want to put the QA in with the observation and I think we should move ahead with that and keep in mind this discussion which is a good one.

So let's go forward beyond 419.1. What is our next, 0.2? Pardon, 0.2?

MS. GOGLIOTTI: Correct, Ron and Emily.

DR. BUCHANAN: Yes. This is Ron and we're going on to the findings now that was for 419 and I want to give a little bit of background because Findings 2, 3, and 4 all hinge on the following issue, and that is what should this worker have been assigned as far as external and

internal dose.

Let me review this case a little bit so it gives you a little better background because there is some decision here that needed to be made on what should have been assigned.

This worker worked as an [identifying information redacted]. The CATI report was not very definite on what the worker did or anything that stood out by the survivor.

The worker worked at the Fermi National Lab, Lawrence Livermore National Lab, and the Nevada Test Site for a short time in [identifying information redacted], and then at the Rocky Flats plant.

And the question is at the Rocky Flats plant (telephonic interference) what kind of dose. The worker worked at the Fermi Lab in [identifying information redacted], Livermore [identifying information redacted], was at the Nevada Test Site [identifying information redacted], worked at the Rocky Flats plant from [identifying information redacted], and visited there in [identifying

information redacted].

The worker was badged at most of the facilities except Rocky Flats, and the worker was badged the last part of '91 and '92, so there is about from '87 to '91 the worker was not badged at Rocky Flats and the worker did not have any bioassays, I believe, at Fermi, the Nevada Test Site or Rocky Flats.

The worker was assigned at Fermi Lab, there was no bioassay and there is no ambient significant dose and so was not assigned a dose there.

The Livermore Lab had some bioassays and assigned, they was all below detectable, so it was based on the MDA and environmental when there was no bioassay.

The Nevada Test Site there was no bioassay that was covered under the SEC. Of course, they couldn't reconstruct intake there, and Rocky Flats there was no bioassay, but was badged at the end of the employment period at Rocky Flats.

So according to the title the person was a [identifying information redacted] at all of the facilities and there was some question then since the worker was badged on the last part of '91 and '92 but not the earlier part from '87 to '91 and did not have bioassays, what should be assigned, and this applies to photon dose and to neutron dose and to internal intake.

And so I went over that to give you an idea of what this person was involved in because they questioned four -- Findings 2, 3, and 4 was since the worker was not badged, the dose reconstructor assigned a missed dose for the end of '91 and '92 when the worker was badged for four quarters and zeros were recorded.

The worker was assigned environmental dose for all the previous times, years at Rocky Flats, the four years before that and the internal dose was assigned environmental intakes.

And that was based upon apparently one statement, or at least one statement which the worker at Livermore National Lab, it was stated

that the worker was involved in plant and environmental sampling, Page 9 of the DOL file, and so this was assumed that it would have similar jobs at Rocky Flats.

SC&A questioned this in that there really is no written documentation what the worker did at Rocky Flats and so it did not state that he worked in the environment at Rocky Flats and at one place it said helped with cleanup.

And so SC&A, the reason they made these three findings was to bring out the point that the worker did not have dosimetry in the early part of Rocky Flats, did in the later part, and according to the Rocky Flats guidance it says that coworker dose should be assigned when there is gaps in the dosimetry dose.

Now this was, of course, more than a gap, about four years from '87 to '91, and there was no bioassay data. So it brings up to sort of a judgment call on whether this person should have been assigned environmental or coworker dose.

And so this is what SC&A was bringing

up these three findings for, so I feel that this needs some discussion on what should have been assigned.

MEMBER BEACH: Ron, I don't see the case attached here, did I just miss it, because normally these have the case where we can review the cases on them?

DR. BUCHANAN: Yes. I believe it's attached up on the first one --

MEMBER BEACH: Oh, there it is, yes. Yes, I got it.

MS. BEHLING: This is Kathy Behling. And I'm not very familiar with this particular case, but during the years that the individual was monitored during the end of his employment at Rocky Flats, did he have, what kind of doses were the dosimeter readings recording?

MR. SIEBERT: They were all zeros.

DR. BUCHANAN: All zeros, four quarters in the end of '91 and part of '92 up until termination were zeros, right.

MR. SIEBERT: And Ron explained it

pretty well. This is Scott. Our position is the fact that it doesn't appear that there is any reason to doubt that Rocky Flats was monitoring when they needed to because they did actually monitor him at some point.

When they did monitor him they were clearly zeros, the deep dose, so they are really -- and they didn't gather any bioassay data. Based on that and the fact that the word cleanup from a survivor can mean a lot of different things, there really wasn't a reason for us to believe that the person was being exposed when there was no monitoring being done by the site.

Generally speaking the Rocky Flats site was, their program was they were monitoring individuals when they needed to be, so that's the bottom line as to why it was not assigned.

There does not appear to be any reason that the individual should have been monitored, and just one thing I want to point out, the portion of the DR guidance that Ron quoted saying that for gaps we should assign coworker, that is accurate when

we believe that monitoring should have occurred.

However, in this case, it doesn't appear, to us at least, that monitoring should have occurred. There is just no indication that the person was being exposed.

MEMBER CLAWSON: This is Brad. Too, you know, looking at his job title, too, that's probably not, he was behind a desk most of the time. Sorry, that was --

MR. SIEBERT: Well --

MEMBER CLAWSON: That was a joke for you guys.

CHAIRMAN KOTELCHUCK: I was on mute. Dave. So I missed that, but how confident are we that the person worked outdoors?

DR. BUCHANAN: That is the issue. We're not sure. We only go, NIOSH is going by the statement that he worked outdoors at Livermore, in the environment.

CHAIRMAN KOTELCHUCK: Yes. I mean because --

DR. BUCHANAN: We don't know at Rocky

Flats.

CHAIRMAN KOTELCHUCK: There. I mean there may have been studies where they put, you know, they put a radioactive source near the plant so they could see what the impact was, in which case the person, you know, the plants are being dosed and the persons working around the plant.

Now you acknowledge that the people at Rocky Flats, the evidence would be that if the people at Rocky Flats didn't measure his dose then they probably didn't need to measure it, but that's not, one can't be altogether confident about that.

MR. SIEBERT: Well once again, and a few reminders, the individual was working for [identifying information redacted] during the time frame, that's an [identifying information redacted] consulting company.

You know, they're not necessarily the people who run out and swing meters. They are generally looking at various parts of a process and it all depends on specifically what he was doing.

But once again, it's a subcontractor

who there is no indication whatsoever that he should have been monitored, was monitored for some of the time.

CHAIRMAN KOTELCHUCK: Yes, yes.

MS. BEHLING: This is Kathy Behling. And, again, this was in the '80s and '90s so I also would have anticipated he would have been monitored if he needed to be during that time frame. If it was earlier --

CHAIRMAN KOTELCHUCK: Right, that's true. I mean the programs picked up all over in the '80s and '90s in terms of doing things consistently and having improved oversight.

MEMBER MUNN: We have no reason to believe that he should have been monitored. Nothing indicates that that's a probability.

CHAIRMAN KOTELCHUCK: Yes, that's true. Well, should we go along with ambient dose?

MEMBER MUNN: Well is there any further discussion on this necessary?

CHAIRMAN KOTELCHUCK: Well, I don't -- I don't feel entirely comfortable, but on the other

hand I agree that there is not evidence to contradict the external dose assignment, so I guess I would go along with it. Again, other comments?

MEMBER BEACH: I kind of disagree, Dave, and only because I think that it bears more looking into.

CHAIRMAN KOTELCHUCK: Yes.

MEMBER BEACH: I mean it's hard to make a judgment when you don't have all the facts.

MEMBER MUNN: We never have all the facts.

MEMBER BEACH: Well I understand that, but --

MEMBER MUNN: And what can you do to try to identify where, we can't -- as the claimants have pointed out to us from day one, we can't tell where they went.

That's the same old thing that we have over and over again.

CHAIRMAN KOTELCHUCK: Right.

MEMBER MUNN: You don't know where they went and in the absence of evidence that folks were

exposed we can't just out of the goodness of our hearts assume that everybody is being dosed with the worst, or even mediocre or even elevated exposures.

CHAIRMAN KOTELCHUCK: Yes.

MEMBER MUNN: We can't make things up by ourselves any more than they can make things up by themselves.

CHAIRMAN KOTELCHUCK: Sure. Is there any more information that we could gather if we were to ask for further work on this and not make a decision? Where could we turn for further evidence, Josie?

MEMBER CLAWSON: Have we ever thought about talking to [identifying information redacted] about this --

CHAIRMAN KOTELCHUCK: Pardon?

MEMBER CLAWSON: Have we ever thought about talking to [identifying information redacted] about this, have we researched that?

It's my understanding that he was part of his association. He'd be able to tell us what

kind of work he did or if he was even out in the area.

CHAIRMAN KOTELCHUCK: Yes.

MEMBER BEACH: Well, and the choices between ambient dose or coworker model, is that correct --

CHAIRMAN KOTELCHUCK: Right.

MEMBER BEACH: -- and which one is more claimant-favorable.

DR. NETON: Brad, this is Jim. I think trying to find out what the contract that [identifying information redacted] had during that time period might be worthwhile.

MEMBER CLAWSON: You know, I said that jokingly. I was trying to get a rise out of Scott, or you, or somebody, but the whole thing is, is what Scott said, they weren't the ones out there swinging the meter, but he may have had a process, and this is why I hate putting a name or a job title on somebody, he may have been out assessing part of the process for anything else like that which it may have been more or less, but, you know, you'd

think that it would monitored.

DR. NETON: It certainly would have been some type of a contract, which, you know, there is probably records at [identifying information redacted] related to that.

MEMBER CLAWSON: I just think --

DR. NETON: But I'm not sure logistically how that would work, how we would approach [identifying information redacted], but I think it merits some consideration.

MEMBER CLAWSON: I think with a phone call maybe, I don't know. But anyway, yes, that would be --

DR. NETON: Probably got the Privacy Act thing going here.

CHAIRMAN KOTELCHUCK: Right.

DR. NETON: Yes.

CHAIRMAN KOTELCHUCK: Why don't we try that? Why don't we try to see if we can get some more information on a contract?

MEMBER MUNN: I have no objection to that, but I might point out that if I was

understanding correctly what we were just discussing this employee is not just a Rocky Flats employee.

Apparently there were many other cases, many other sites where he was involved in work also, in which case we're talking about a nightmare of coworker models.

MR. SIEBERT: Well, and one thing I want to point out, too, is once again he was monitored during some of his time at Rocky Flats and everything was zero.

So it really doesn't make sense in my mind that the times where he wasn't monitored we would be assigning coworker, which is a much larger value than any indication of anything even when he was monitored at the site.

It just doesn't pass the sniff test to me.

CHAIRMAN KOTELCHUCK: Yes.

MEMBER MUNN: Add to that the fact that I can't imagine [identifying information redacted] organization sending any employee into harm's way

without a badge. I can't imagine that. So, yes, it just doesn't make sense to me in the first place. They wouldn't do it themselves.

CHAIRMAN KOTELCHUCK: Do they have any data?

MEMBER MUNN: I doubt --

CHAIRMAN KOTELCHUCK: Do you think they would have any data?

MR. SIEBERT: I can't imagine that they would. They would have been monitored by the site.

CHAIRMAN KOTELCHUCK: Yes, yes.

MR. SIEBERT: But once again, remember, this person is an [identifying information redacted], so they know what they are doing and whether there should be monitoring involved, in my mind.

MEMBER MUNN: Yes.

CHAIRMAN KOTELCHUCK: That's true. That's true.

MR. SIEBERT: This is Scott. Once again, I really don't think there is much more, actually I don't think there is any more

information that we could really find out that's going to give us anything more definitive.

I think it just comes down to a professional judgement of what seems appropriate for this type of individual based on the information that we have on hand.

And NIOSH has made pretty clear where we believe that the preponderance of the evidence lays.

CHAIRMAN KOTELCHUCK: Well I think, I guess I'm coming around to what do we lose. What do we lose trying to find out a little bit more information?

I think you're right that probably we're not going to get anything much more, but I would feel more comfortable, as usual, trying to get all the information that we can get and then making a decision, hard or not, with that.

And this is somewhat more information, the contract, and it wouldn't involve perhaps more than a phone call, so it would simply delay this, delay this review.

So I think I would actually opt for holding it and checking with the -- checking out the contract. Is that something that NIOSH would do?

MEMBER MUNN: It would be something NIOSH would have to do.

CHAIRMAN KOTELCHUCK: Yes, okay.

MEMBER MUNN: If we are going to recommend that, I hesitate to do that myself, but your call.

CHAIRMAN KOTELCHUCK: Well, if it's my call I would say let's check it out and the worst that will happen is we spent a little time and we've got -- and we will make a decision the next time, so let's hold it until the next meeting.

I assume we can get that information by the next meeting. Yes, Jim?

DR. NETON: Yes, I think so.

CHAIRMAN KOTELCHUCK: Okay.

DR. NETON: At least attempt to get it.

CHAIRMAN KOTELCHUCK: Okay. Well let's go on, then. Three, four -- and obviously

three, four, and five are going to be about the same issue, right?

DR. BUCHANAN: Two, three, and four.

CHAIRMAN KOTELCHUCK: Pardon?

DR. BUCHANAN: Two, three, and four are the same issue.

CHAIRMAN KOTELCHUCK: Yes, yes.

DR. BUCHANAN: Okay.

CHAIRMAN KOTELCHUCK: So we'll hold all those till we get -- and then we'll make a decision. So let's go on to Task 419.

DR. BUCHANAN: Okay. So we'll go to 419. The observation happens to be listed at the end here, so we'll cover it now.

CHAIRMAN KOTELCHUCK: Okay.

DR. BUCHANAN: This was where we believe NIOSH did perform, they didn't respond so it's still open, the dose -- this observation was that the dose reconstructor followed OTIB-5, but had been very helpful, but this was finding the primary cancer site because -- this was necessary to go through the process to find what the primary,

the candidates for the primary cancer site would be for this particular cancer.

And it was found that it was the lung, and so it took a lot of dose reconstructing on our part to find out how they, that they arrived at the lung. It was just stated in the DR the lung and it went on to do the dose reconstruction, which was done correctly.

Other than the other issues we've had, we had no problems with using the lung except it would have saved us a lot of work if they had stated that they went through the organs and found the lung was the highest in whatever they went through.

So this is an observation that would save us auditors lot of work if we do this to begin with, because we had to verify that that was true in this case.

CHAIRMAN KOTELCHUCK: Right.

DR. BUCHANAN: And so that was our observation and they didn't provide a response, so I don't know how you want to handle that.

CHAIRMAN KOTELCHUCK: Right. Oh, I

think that was well -- your concerns were well taken and this is indeed an observation and you did find out that, in fact, lung was the most appropriate organ.

So I would just say this is good observation and close it, unless anybody else has concerns.

MEMBER MUNN: None here.

CHAIRMAN KOTELCHUCK: Okay. Let's go to the next one. Okay, wait a minute, 419 --

DR. BUCHANAN: That's a duplicate. Rose --

CHAIRMAN KOTELCHUCK: Right, it is.

DR. BUCHANAN: -- you might want to remove that.

CHAIRMAN KOTELCHUCK: Yes. Rose, I don't know who -- who removes it, the duplicate?

MS. GOGLIOTTI: I'll contact Laurie and she can remove it for me.

CHAIRMAN KOTELCHUCK: Okay, alright. Good. And are we up to Rocky Flats 388?

DR. BUCHANAN: Yes, 388, Observation

1. Okay, this is, we want to clarify because I think we covered this before, but this observation was about when we use 100 percent less than 30 keV photons, 100 percent 30 to 250 keV photons, and I think that we covered this previously and that you said this would be clarified in the revised TBD, but it hadn't been issued yet.

And so for this observation I'm just asking that NIOSH clarify that we understand this right, that for dose reconstruction at Rocky Flats we use 100 percent less than 30 keV and 100 percent 250, or 30 to 250 keV for recorded dosimetry data, or coworker data, we only use the split of 25/75 plutonium workers when we use an external dose rate, is this a correct statement?

MR. SIEBERT: That's accurate.

DR. BUCHANAN: Okay. And that will be clarified in the revised TBD?

MR. SIEBERT: Correct. It's presently in the Rocky Flats dose reconstructor guidance.

DR. BUCHANAN: Okay.

CHAIRMAN KOTELCHUCK: Okay, good, then that closes that observation.

DR. BUCHANAN: Okay. And the next two we can go through fairly quick, 388.1 is the 1966 neutron dose not assigned, and NIOSH agreed that that's a correct observation and that it was an error in the workbook version at that time and that it was a small dose, it wouldn't impact, but it was an error and it had since been corrected.

We went back and checked the later version of the Rocky Flats workbook and checked that Column W is correct now and it has -- there it has been corrected and we recommend closing it.

CHAIRMAN KOTELCHUCK: Good. Move to close, anybody have any concerns?

Okay.

MS. BEHLING: This is Kathy Behling. Could I just ask a question?

CHAIRMAN KOTELCHUCK: Sure.

MS. BEHLING: That error, was that an increase in dose or a decrease in dose and was there any need to look back on other cases? Maybe I

missed something.

In other words, if there was an error in the workbook and it was corrected that's fine, but is there any need to go back to cases that were done using that workbook if this would have an impact on increasing their dose?

MEMBER MUNN: We do that automatically with procedures, but not necessarily with workbook.

MS. BEHLING: Scott, do you -- can you, do you have any --

MR. SIEBERT: We do track the changes to the workbooks and one of the things we had discussed with NIOSH is when it is appropriate to go back and do a PER based on workbook changes, so that discussion is an ongoing discussion.

I can't specifically speak to this one, but suffice it to say, we are looking at those situations when they are appropriate and we are dealing with PERs.

This was done in 2008. I'd have to look at it, it may have already been covered under PER

-- for another Rocky Flats PER.

MS. BEHLING: Okay. Because I usually keep track of the PERs on this end and I'm not sure that I am aware of this. I don't know if we need to look into that further or not.

MEMBER MUNN: It would be a worthwhile piece of information probably.

CHAIRMAN KOTELCHUCK: Pardon? Wanda, pardon?

MEMBER MUNN: I said it would probably be a worthwhile piece of information.

CHAIRMAN KOTELCHUCK: I think it would be.

MEMBER MUNN: Well, it's just a matter of checking records.

CHAIRMAN KOTELCHUCK: Let's just check it for next time and just leave it in progress.

MS. GOGLIOTTI: And so that would be a NIOSH action?

CHAIRMAN KOTELCHUCK: Yes, right, NIOSH. Okay, 0.2?

DR. BUCHANAN: Okay, now 0.2 is a very

similar issue as they omitted the dose for 1964 and, again, this was the older version of the Rocky Flats Workbook, ignored the zero, and it was changed in the revised in 4.04 and it resulted an omission of a small dose.

And then we did go back and check the later version of the workbook and it had been corrected in Column U, but it's the same issue as the previous one.

CHAIRMAN KOTELCHUCK: Right. And should it not then be just checked?

DR. BUCHANAN: Yes, we can do the same as before.

CHAIRMAN KOTELCHUCK: Yes, let's do that, folks. Let's just check it. So we'll do 0.1 and 0.2. Is there another?

DR. BUCHANAN: That's all of them.

MS. GOGLIOTTI: That is the end of this matrix, so we'll open the next one here.

CHAIRMAN KOTELCHUCK: Okay, good, that's fine. Then let's go on to INL and NTS.

MS. GOGLIOTTI: Okay.

CHAIRMAN KOTELCHUCK: Good, moving right along.

MS. GOGLIOTTI: The first one here is an INL case, Tab 422, Finding 1, and the finding was that NIOSH did not assign any missed neutron dose for the years 2000, 2001, 2009, and 2010.

When NIOSH looked at this they found that really two separate errors had occurred here. With the 2000 and 2001, this was an error that simply the DR missed and --

MR. SIEBERT: I'm sorry, can we say again which finding number we are talking about? It's not on --

MS. GOGLIOTTI: 422.1.

MR. SIEBERT: Thank you.

MS. GOGLIOTTI: Oh, my -- is it on -- okay.

MR. KATZ: And this is INL?

MS. GOGLIOTTI: Correct.

CHAIRMAN KOTELCHUCK: Yes.

MS. GOGLIOTTI: And then the second issue was for 2009 and 2010, the dose reconstructor

calculated the dose correctly, but when they were copying and pasting their work into IREP, which does the actual PoC calculations, they missed the last two lines.

The IREP, the workbook now doesn't make the dose reconstructors cut and paste anymore, so that type of error is eliminated in future dose reconstructions.

However, the first error was just a manual DR entry.

CHAIRMAN KOTELCHUCK: Yes. Well, it's a quality --

MS. GOGLIOTTI: And this has a very minor impact on this particular case, so we would recommend closing the finding.

CHAIRMAN KOTELCHUCK: Right. Right, that sounds reasonable. It was an error, quality assurance error. Okay, should close.

MS. GOGLIOTTI: Great.

CHAIRMAN KOTELCHUCK: Again, unless I hear anybody -- as we move along if there is ever any question by our Subcommittee Members just say

so. Let's go ahead to 422.2.

MS. GOGLIOTTI: Yes. In this finding NIOSH was intending to model a chronic intake of actinides for January 1989 through December 2000, but they actually only modeled the chronic intake for the year 1989, so they selected the wrong end date which resulted in omitting a decade worth of dose.

CHAIRMAN KOTELCHUCK: Hmm.

MS. GOGLIOTTI: And NIOSH agrees this was an error that happened in the CADW Workbook, but it didn't have a significant impact on the PoC of the case.

CHAIRMAN KOTELCHUCK: Missing a decade did not have --

MS. GOGLIOTTI: Of chronic intake.

CHAIRMAN KOTELCHUCK: Chronic intake, okay, alright. Then that sounds like it should be closed.

MEMBER MUNN: Yes.

CHAIRMAN KOTELCHUCK: Okay.

MS. GOGLIOTTI: Okay. Same case, Tab

422, Finding 3, and the finding states that there was a failure to account for recycled highly enriched uranium contaminants and NIOSH does agree that they didn't include this.

They should have included it, however, if they included it the results would have been insignificant. The TBD does require that it is documented, or specifically states that it should be documented, even if the dose was less than a millirem.

So it didn't have an impact on the case, but it should have been discussed in the DR Report.

CHAIRMAN KOTELCHUCK: Yes. Now is this, is the problem that it wasn't discussed?

MS. GOGLIOTTI: It wasn't even considered here.

CHAIRMAN KOTELCHUCK: Okay, then that's -- then it should have been.

MS. GOGLIOTTI: It should have been considered.

CHAIRMAN KOTELCHUCK: Right, okay.

MS. GOGLIOTTI: It's just a matter of

finding out that it doesn't contribute would have been.

CHAIRMAN KOTELCHUCK: Right.

MS. GOGLIOTTI: Yes.

CHAIRMAN KOTELCHUCK: So I think we should close it as an observation.

MS. GOGLIOTTI: Okay. Moving on to the next case here is an INL and ANL-West case, Finding 372.1, and here this has to do with X-ray dose that was assigned.

It was a skin cancer on the [identifying information redacted] of the EE and it should have been assigned as a lung dose from an X-ray point of view and instead NIOSH used the entrance skin dose.

And there was also a secondary aspect of this finding where NIOSH had assigned an X-ray to the year 1969 even though the EE wasn't employed at that time.

And so when you take those two things into consideration they actually kind of cancel each other out and the dose does decrease.

CHAIRMAN KOTELCHUCK: Okay.

MS. GOGLIOTTI: And here you will see the --

CHAIRMAN KOTELCHUCK: Yes.

MS. GOGLIOTTI: It was a very low PoC to begin with.

CHAIRMAN KOTELCHUCK: That is really low. But, anyway, that's again, not to be considered in our findings so much as the fact that we corrected the X-ray dose and calculated the probability.

So that should be closed. It just seems to me there's not even a question on that.

MS. GOGLIOTTI: I would agree.

CHAIRMAN KOTELCHUCK: Let's go on.

MS. GOGLIOTTI: Okay. The next observation comes from Tab 383, which is an INL and Nevada Test Site case.

CHAIRMAN KOTELCHUCK: Oh, yes.

MS. GOGLIOTTI: Here the observation states that we found the use of a BP, which is a beta/photon ratio, was, a five was used for this

particular claimant who was a [identifying information redacted] and we thought that was just excessively claimant-favorable.

The TBD recommends that you only use that value when the EE is a tunnel operator and a value of 1.04 for all other workers. And NIOSH agreed that this was acceptably claimant-favorable and would result in a very large, an overestimated dose and recommends --

CHAIRMAN KOTELCHUCK: Okay. And that, but that -- under any circumstance that wouldn't change the decision, right? I mean, we're not looking to see what the PoC, the compensation decision?

MS. GOGLIOTTI: The compensation decision, I believe, was not impacted by that.

CHAIRMAN KOTELCHUCK: Yes, yes. Okay, I think that we should close it.

MEMBER MUNN: Yes.

CHAIRMAN KOTELCHUCK: Okay.

MS. GOGLIOTTI: Alright, and the next one from the same case is the first finding, and

the finding states that NIOSH used a 30 millirem recorded photon dose for the year 1958 to the [identifying information redacted] which is not listed in the DOE file.

And here actually NIOSH points out that it was listed in the files, but they incorrectly did not assign it to the [identifying information redacted] and did assign it to the [identifying information redacted], so we kind of caught the inverse of the problem, but we did still catch that there was something incorrect here.

CHAIRMAN KOTELCHUCK: Yes.

MS. GOGLIOTTI: And NOISH essentially says that the DR forgot to press calculate dose when they were in the workbook, which caused this problem.

CHAIRMAN KOTELCHUCK: Yes, okay.

MS. GOGLIOTTI: It was a fairly minor dose.

CHAIRMAN KOTELCHUCK: Yes. But it's a finding and it should be closed. NIOSH agrees. Let's go ahead.

MS. GOGLIOTTI: Okay. The next finding, 383.2, NIOSH did not apply the dosimeter correction factor to greater than 250 keV photons for the 1965 [identifying information redacted] dose.

And here NIOSH agrees that they should have applied the dosimeter correction factor to the [identifying information redacted] dose.

CHAIRMAN KOTELCHUCK: Yes.

MS. GOGLIOTTI: And so this is just a DR error.

CHAIRMAN KOTELCHUCK: Okay. Closed.

MS. GOGLIOTTI: Okay, and the next finding, Finding 3, same case. NIOSH did not apply a dosimeter correction factor when calculating missed photon dose. This is similar to the last issue.

CHAIRMAN KOTELCHUCK: Yes.

MS. GOGLIOTTI: NIOSH agrees that it wasn't applied consistently and should have been.

CHAIRMAN KOTELCHUCK: Yes, right. Same, and same --

MS. GOGLIOTTI: Minor dose --

CHAIRMAN KOTELCHUCK: Okay, so we'll close that. Number 4.

MS. GOGLIOTTI: Okay. This one is a little bit more complicated. Here the finding states that NIOSH omitted one zero dose for the year 1965, but applied excessive [identifying information redacted] dose --

CHAIRMAN KOTELCHUCK: [identifying information redacted] zero dose?

MS. GOGLIOTTI: Which is the missed dose. And here NIOSH disagrees with us and they feel that their zeros are justified.

CHAIRMAN KOTELCHUCK: Okay. Well --

MS. GOGLIOTTI: Well, they agree with the 1965, but they feel that the rest of the zeros were justified.

CHAIRMAN KOTELCHUCK: Yes.

MS. GOGLIOTTI: They asked us to point out further. And this is kind of an interesting error that occurred, and I'm not quite sure how it occurred, but for the [identifying information

redacted] they assumed there were 440 zeros, but for the [identifying information redacted] they assumed there were only 413 zeros.

And so this seems to be an inconsistency in how dose is applied, and Ron made this great figure here that kind of compares for each year how many zeros were assigned.

So, for instance for 1953 for the [identifying information redacted] there were 38 assigned, but for the [identifying information redacted] there were 68 zeros assigned, which is a fairly significant difference in dose.

CHAIRMAN KOTELCHUCK: Yes.

MS. GOGLIOTTI: So I'm not sure what would cause this error, but these are the calculated doses that we have.

CHAIRMAN KOTELCHUCK: Could we go back to the previous screen?

MS. GOGLIOTTI: Yes.

CHAIRMAN KOTELCHUCK: I don't -- it looks to me as if these are two findings and I want to separate the discussion.

MS. GOGLIOTTI: Well, there's --

CHAIRMAN KOTELCHUCK: There is a missed data entry file, right, that there is no debate about?

MS. GOGLIOTTI: NIOSH agrees with the 1965 error.

CHAIRMAN KOTELCHUCK: Okay. So then that would be a finding. Now the question of zero doses is a different question, yes?

MS. GOGLIOTTI: The same issue but different applications. So --

CHAIRMAN KOTELCHUCK: I suppose so.

MS. GOGLIOTTI: -- I think the five they agree with, but the [identifying information redacted] dose was more of an excessive [identifying information redacted] zero, or at least the missed dose in our opinion.

CHAIRMAN KOTELCHUCK: Yes. Yes. Well, what do -- maybe folks from NIOSH could explain their feeling.

MR. SIEBERT: I'm going to have to go back to the dose reconstructor who did this and

spend some time walking through it with him, so I can't give you an answer at the moment.

CHAIRMAN KOTELCHUCK: Okay, that's fine. So this would be in progress and we'll --

MS. GOGLIOTTI: It's okay and --

(Simultaneous speaking.)

CHAIRMAN KOTELCHUCK: -- discuss it next time.

MS. GOGLIOTTI: The only reason we have this as a finding is because they are pretty different in the number of zeros assigned to two different organs for the same claimant.

CHAIRMAN KOTELCHUCK: Yes, yes. No, that's ultimately -- right, okay. We'll go on then and we'll come back to this next time.

MS. GOGLIOTTI: Okay, we'll leave that one open then.

CHAIRMAN KOTELCHUCK: Yes.

DR. NETON: This is Jim. That wouldn't be something as simple as a beta cancer diagnosis would it?

MS. GOGLIOTTI: No, not with this

particular one.

DR. NETON: Because they would have had to been identified exactly at the same for the number to be exactly the same for those two cancers.

MS. GOGLIOTTI: Not necessarily. Most of the time the cancers are after employment has ceased, or at least the cases that we see --

DR. NETON: That's true, yes. Anyway, just a thought.

CHAIRMAN KOTELCHUCK: Okay.

MEMBER MUNN: Too simple.

CHAIRMAN KOTELCHUCK: Okay.

MS. GOGLIOTTI: Okay, the next finding from the same case, Finding 5, NIOSH assumed twice the correct missed neutron dose of the [identifying information redacted].

And here NIOSH disagrees with us. Apparently they used the inverse of the bias as the dosimeter correction factor, which kind of canceled out the error that we thought had occurred.

CHAIRMAN KOTELCHUCK: Yes.

MS. GOGLIOTTI: And then they did also omit the missed dose neutron calculations for the [identifying information redacted], which is somewhat of a different error, but we backed into it through this finding.

CHAIRMAN KOTELCHUCK: Yes.

MS. GOGLIOTTI: And we do recommend closing this, but we do have a question on the QA side of things. We want to know, was the DR reworked to include the omitted factor?

And, actually, I believe for this case it was reworked and compensated, so I don't think that that is an issue anymore, but has this process been corrected in the workbook?

MR. SIEBERT: This is Scott. Yes, this is a very old tool, a complex, wide, best-estimate tool that had to be specifically tailored back at the time frame we were doing these claims with site-specific information, so that tool does not exist anymore.

It would have been used by the dose reconstructor on the specific single claim. The

INL tool that exists now does have this applied correctly.

MS. GOGLIOTTI: Okay. So this was an error where the dose reconstructor misused tools?

CHAIRMAN KOTELCHUCK: Yes.

MR. SIEBERT: Correct.

CHAIRMAN KOTELCHUCK: Okay. But, I think that was five. NIOSH was correct, okay.

MS. GOGLIOTTI: They were correct in part, but there was in fact an error that occurred.

CHAIRMAN KOTELCHUCK: Okay. Well, there you're right.

MS. GOGLIOTTI: Omitted neutron dose for [identifying information redacted].

CHAIRMAN KOTELCHUCK: So I think we would close this as an observation.

MS. GOGLIOTTI: Well there was an error that occurred.

CHAIRMAN KOTELCHUCK: Yes. I mean, did I say -- I said an observation, I meant, excuse, I meant finding.

MS. GOGLIOTTI: Okay.

CHAIRMAN KOTELCHUCK: This is what happens later in the day. So, alright, any concerns on the part of other Subcommittee Members?

MEMBER MUNN: No.

CHAIRMAN KOTELCHUCK: Okay.

MEMBER BEACH: No, none here either, Dave.

CHAIRMAN KOTELCHUCK: Okay, then that's fine. Let's go on to six.

MS. GOGLIOTTI: Okay, this is --

CHAIRMAN KOTELCHUCK: Lots of findings on this case.

MS. GOGLIOTTI: Yes, lots of findings. Okay, this finding states that NIOSH used the incorrect prorated values for the years 1953 and 1964.

And here NIOSH agrees that a value of 0.73 should have been used for 1953 and a value of 0.67 should have been used for '64.

CHAIRMAN KOTELCHUCK: Yes.

MS. GOGLIOTTI: Apparently, it was corrected in the workbook, but for some unknown

reason the dose reconstructor didn't use the values.

CHAIRMAN KOTELCHUCK: Okay.

MS. GOGLIOTTI: This was a dose reconstructor error and we would recommend --

CHAIRMAN KOTELCHUCK: Okay.

MS. GOGLIOTTI: It's a fairly minor error.

CHAIRMAN KOTELCHUCK: Then I think we could close it. Could I ask a question? Here, we're going into the seventh finding on this case, is that something that would have triggered some closer supervision and discussion with the dose reconstructor by the managerial people, by the supervisory people?

MS. GOGLIOTTI: From SC&A's perspective?

CHAIRMAN KOTELCHUCK: No, no --

MR. SIEBERT: He's talking to the NIOSH --

CHAIRMAN KOTELCHUCK: No, I'm talking to the NIOSH people.

MR. SIEBERT: Which is fine. Yes, it normally would because we would normally have the dose reconstructor explaining what they did in these claims, giving me the responses.

CHAIRMAN KOTELCHUCK: Yes.

MR. SIEBERT: However, this dose reconstructor is no longer on the project, it hasn't been for a while, so there is no way to correct that individual.

CHAIRMAN KOTELCHUCK: Right. But I -- let's put it this way, I assume you spoke to the individual at the time, I mean that that rang alarm bells?

MR. SIEBERT: Well, this individual --

CHAIRMAN KOTELCHUCK: Oh, no, no, the -- I'm sorry.

(Simultaneous speaking.)

MR. SIEBERT: -- findings came out.

CHAIRMAN KOTELCHUCK: Right, the findings came out, the SC&A findings came out after the individual had gone.

MR. SIEBERT: Correct.

CHAIRMAN KOTELCHUCK: So, I'm sorry. So there was no way to go back to the individual on this one. But if the individual were still working you would be having some discussions about this case?

MR. SIEBERT: Yes. If the individual was still working generally they'll be the ones to develop the additional responses and through the discussion with that it's very clear that there were problems in the case if that's the case.

CHAIRMAN KOTELCHUCK: Yes, okay. That's good to hear and reassuring. Let's go on to seven.

MS. GOGLIOTTI: Okay. This finding states that NIOSH quoted the incorrect reference in the DR Report and NIOSH agrees that PROC-60 should have been referenced.

CHAIRMAN KOTELCHUCK: That sounds like an observation, doesn't it?

MS. GOGLIOTTI: I agree.

CHAIRMAN KOTELCHUCK: It's a reference.

MS. GOGLIOTTI: Now it does impact how we do our reviews, but judging by how we have previously assigned observations it would fall into that category.

CHAIRMAN KOTELCHUCK: Yes. I think this is an observation and it is a -- yes, it's an observation, it's not a QA. Or is it a QA issue?

MS. GOGLIOTTI: Well, I would --

CHAIRMAN KOTELCHUCK: Well, they should have referenced it.

MR. KATZ: It's still an observation, it's just a QA observation I guess, like as we just defined earlier.

CHAIRMAN KOTELCHUCK: Yes, yes. Okay, yes, yes. Alright, QA observation, close observation.

MS. GOGLIOTTI: Okay.

CHAIRMAN KOTELCHUCK: Yes.

MS. GOGLIOTTI: And same case, Finding 8, NIOSH did not address internal intakes from the SL-1 entry and that was an incident that occurred that required cleanup, I believe, and NIOSH

disagrees with us here.

They say that the EE's SL-1 October 1961 entry was made long after the SL-1 rescue and stabilization efforts and should have been part of the accident cleanup effort.

CHAIRMAN KOTELCHUCK: Yes.

MS. GOGLIOTTI: The cleanup work would have been planned work that would have been performed in accordance with INEL's radiological detection protection protocols, so there is no reason to believe that the EE wasn't adequately monitored during the planned entry into the SL-1 area and because there is no information to indicate that the EE had an unplanned intake of radioactivity from the entry there is no need to address it.

And this is NIOSH's statement, however, we'd just point out that the records show that the EE did receive approximately two rem of photon dose and four rem of beta dose during October 1961, which is fairly significant, levels that we don't typically see, that we see in a dose reconstruction

review perspective.

And they weren't bioassayed until June of 1962 and we think this issue falls unto our TBD review Finding 15, which to my knowledge has not been addressed yet by the INL Work Group.

CHAIRMAN KOTELCHUCK: Yes.

MS. GOGLIOTTI: So it might make sense to hold off on this issue until the INL Work Group meets and discusses that issue.

CHAIRMAN KOTELCHUCK: Okay.

MS. GOGLIOTTI: Where I believe they are now focused now on SEC issues, so that could be a substantial period of time.

CHAIRMAN KOTELCHUCK: Okay, sounds reasonable.

MR. KATZ: That's quite a while. So, Rose, if you would just send me the briefest of emails but reference the case and the issue then I can send that over to the INL Work Group just so that this doesn't get lost.

MS. GOGLIOTTI: Okay, I can certainly do that.

MR. KATZ: Thanks.

CHAIRMAN KOTELCHUCK: Okay. Let's go on then.

MS. GOGLIOTTI: Alright.

CHAIRMAN KOTELCHUCK: And we're now at NTS.

MS. GOGLIOTTI: We're into the next case here which is --

MR. SIEBERT: Can I make the suggestion of perhaps a comfort break?

CHAIRMAN KOTELCHUCK: Okay. I was going to do it in about 15 minutes, but, you know, I could be -- but we've got a request for a comfort break. Any objection?

Fine. Ten minute comfort break, sorry.

(Whereupon, the above-entitled matter went off the record at 1:58 p.m. and resumed at 2:14 p.m.)

CHAIRMAN KOTELCHUCK: Okay, let's go on the record now and start our meeting. 370.1, yes.

MR. SIEBERT: I have a question for you

before we move on.

CHAIRMAN KOTELCHUCK: Yes?

MR. SIEBERT: This is Scott, I'm sorry. We do -- I did get a response from Stu on that Fernald observation that we talked about a lot earlier, 373, so I have an initial response whenever you would like to cover it.

I don't know if you want to interrupt now of if you --

CHAIRMAN KOTELCHUCK: Well, we might as well do it right now. Now, let me see, I'm looking at my list.

MEMBER POSTON: Is that Observation 1?

CHAIRMAN KOTELCHUCK: Are you sure it's not Observation 1, 383, isn't it?

MR. KATZ: No 373.

CHAIRMAN KOTELCHUCK: Okay --

MR. SIEBERT: It was one of the first ones we looked at.

CHAIRMAN KOTELCHUCK: Yes, okay, good.

MS. GOGLIOTTI: Just getting it pulled up here.

MS. GOGLIOTTI: Okay, here we go.

CHAIRMAN KOTELCHUCK: Okay.

MR. SIEBERT: And the issue with this is, if everyone remembers, which probably not, we had, there were different cancers that were assigned and the DOL came back with additional cancers and made changes to the cancers and data diagnosis and so on and so forth, and during the middle of the changes from DOL, NOCTS and DOL's information did not match up on one of the cancers.

It didn't make a difference to the claim itself because we went back to the documentation and we used the most appropriate -- the right number of cancers and the right dates, so it had no impact on the case.

But the Subcommittee wanted Stu to go back and look into how the difference in the dates happened.

CHAIRMAN KOTELCHUCK: Right.

MR. SIEBERT: And he spoke to, emailed back and forth with Tracey Gilbertson and it appears that it was just an oversight on their part,

the changing of the date.

So what's going on is from that point forward, which was in early May, it was just a mistake putting it into NOCTS. They forwarded guidance to all the staff indicating all the dated images are to be QA'd 100 percent when they are changed.

So it was just a mistake in putting the information in and there is a process now in place to ensure it does not happen again.

CHAIRMAN KOTELCHUCK: Very good, okay, and that closes it out.

MR. SIEBERT: Yes.

CHAIRMAN KOTELCHUCK: Very good. Alright, so let's go back now to 370.1.

MS. GOGLIOTTI: Okay. This case is a Nevada Test Site case that the EE also visited Amchitka Island Nuclear Explosion Site, Lawrence Livermore National Lab, Pacific Proving Grounds, and Project Faultless Nuclear Explosion Sites, I believe is the acronym, and here the finding states that the [identifying information redacted] cancer

should fall under the SEC, however, the DR Report specifically states that the EE did not meet the criteria for compensation under the SEC.

And NIOSH essentially says that it did qualify for an SEC but the dose reconstruction was needed for the two skin cancers --

CHAIRMAN KOTELCHUCK: Try that again, I couldn't hear you, excuse me.

MS. GOGLIOTTI: Sorry. NIOSH essentially said that the cancer did qualify for inclusion under the SEC but they were two non-qualifying skin cancers, so essentially the text in the actual DR Report doesn't accurately reflect the SEC, which was the problem.

CHAIRMAN KOTELCHUCK: Ah-ha, okay, and that seems appropriate, that the [identifying information redacted] cancer was accepted as it should have been.

MR. SIEBERT: This is Scott. We have since updated the wording in there to say "at least one of the cancers did not qualify under the SEC" so it's clear that some of them may have already.

CHAIRMAN KOTELCHUCK: Yes, good, good. That's a recommended closure and I think it should be closed.

MR. KATZ: And that's a finding?

CHAIRMAN KOTELCHUCK: Yes, it's a finding.

MR. KATZ: Okay.

MR. SIEBERT: Oh, alright. I was going to suggest that be an observation since we did nothing wrong when we did the claim.

CHAIRMAN KOTELCHUCK: Yes, right, right.

MR. SIEBERT: It's just wording in a Dose Reconstruction Report.

CHAIRMAN KOTELCHUCK: You're actually right, and I -- closed, and it will be an observation. Good?

MEMBER MUNN: Agreed.

CHAIRMAN KOTELCHUCK: Okay, 370.2.

MS. GOGLIOTTI: Alright. This is from the same case and the finding states the internal dose section of the DR Report was not clear and

consistent in the dose assignments.

And here NIOSH agrees with us the text was not clear as to why the plutonium worker, coworker intakes were assigned instead of environmental intakes and the assignment was an overestimate for a less than 50 percent claim.

Since it did not result in a PoC over 50 percent, no further action was necessary.

CHAIRMAN KOTELCHUCK: Yes. And is that not an observation? That should be closed as an observation, right?

MS. GOGLIOTTI: We can call that an observation, that's fine.

CHAIRMAN KOTELCHUCK: Yes, okay. 0.3, if there is one.

MS. GOGLIOTTI: This takes us, I believe -- Kathy, is this your case?

MS. BEHLING: Yes, it is. Okay, we're going to move on to my case, which is Tab 387 and --

MR. SIEBERT: Kathy?

MS. BEHLING: Yes?

MR. SIEBERT: Kathy, this is Scott. We may just want to save a little bit of trouble because I don't believe there are any responses in this right now.

It's a NIOSH-specific case and I've talked to Grady and I don't believe there are responses in there yet and we're going to be on top of those to make sure there are.

MS. BEHLING: Okay. There was a response in here.

MR. SIEBERT: Oh, okay, well then never mind, ignore me.

MS. BEHLING: Okay. And as I go through here if you have changed your mind we can talk about that, yes, if you'd like to go on, okay.

But Observation 1 indicates that there was no external dose supporting worksheets in the file and there weren't specific details in the Dose Reconstruction Report regarding recorded modeled electron doses.

And so there were some workbooks that were in the file but they didn't appear to be, they

shouldn't have been in this file I don't think because they didn't go with this particular case, so there was a lot of confusion up front as to how, you know, how NIOSH went about calculating their external doses.

But the response indicates, if I am reading this correctly, that this case was compensated but it does indicate in my reading that NIOSH does pretty much agree with all of our findings, but stated that there was just an administrative issue with the observation and agrees with the other findings.

Some of the findings would have increased the dose, some of the findings would decrease the dose, but the case was compensated. With all that said I'd still like to go through each of the findings, which then there were six of them because I had some questions along the way, if we can continue.

CHAIRMAN KOTELCHUCK: Let's do that.

MS. BEHLING: Okay. Finding 1 has to do with -- NIOSH omitted assigning 40 millirem of

photon dose for 1968, and, as I said, I believe that they are in agreement with that omission.

And I will say Finding 1, Finding 2 is also a NIOSH omission of assigned dose of 65 millirem for the beta recorded dose for 1968, and I'm going to group these so we can move on, and also Finding 5 is an omission of three missed photon doses for '63 and the use of an incorrect MDL for 1971.

And I guess I'm just questioning how all of these omissions happened. I thought it used to be that there were files that would be transferred over to a workbook and the dose reconstructor would verify all of this data.

Is that still happening? Is there something we're not aware of? I am just trying to verify there is no systemic type of issue here.

MR. SIEBERT: Well, this is what I was trying to say.

MS. BEHLING: Oh.

MR. SIEBERT: It's a DCAS claim, it's not an ORAU claim and Grady isn't on the line so

I'm guessing you're not going to be able to get specific answers to anything today.

I am guessing Jim probably is not prepared to get into the specifics on this case, I could be wrong, but --

DR. NETON: No, you're right, Scott. I'm sitting in for Grady and I really don't have any background information on this particular case.

MS. BEHLING: Okay, because I have several questions as we go through here on the findings, so perhaps we better postpone.

CHAIRMAN KOTELCHUCK: Yes, let's postpone, let's do the findings next time.

MS. BEHLING: Okay.

CHAIRMAN KOTELCHUCK: Okay, so --

MR. SIEBERT: Can I ask one favor?

CHAIRMAN KOTELCHUCK: Sure.

MR. SIEBERT: Kathy, can you put your questions into the BRS for each of the findings that you have so that Grady can specifically address each one?

MS. BEHLING: Yes, I will do that. And the only other thing I do want to point out, this particular case we reviewed was revised, so this is a second time around for NIOSH and ORAU to look at this case.

There were changes, they included some radon dose for the bronchus and so it was thereafter that they compensated the case. The first time around, obviously, it wasn't compensated and they looked at it a second time, so that even gives me more, brings to mind more questions as to how this was done a second time and there were still all these omissions and these QA-type of findings.

But I'll put that in the responses into the BRS. I was just trying to make that point.

CHAIRMAN KOTELCHUCK: Okay. So let's go to the next case.

MS. BEHLING: Okay. I believe the next case is also one I'll discuss, and this is Tab 348, and it is a NTS and Pacific Proving Grounds case.

CHAIRMAN KOTELCHUCK: Right.

MS. BEHLING: Alright. Now I think here NIOSH did put in their responses. The first finding has to do with NIOSH -- SC&A assumed that NIOSH used an incorrect dosimeter bias for the 1956 through 1965 time period.

The Technical Basis Document actually states that, at least when we were doing this review, that a dosimeter correction factor of 1.25 should only be applied to the 30 to 250 keV for the years 1960 through 1965.

However, in this case the dosimeter correction factor was applied to both the 30 to 250 range plus the greater than 250 keV range and it was applied for all years, '56 through '65 rather than just 1960 through 1965.

And I believe the response here -- okay, they agree, however, subsequent versions of the TBD indicates this factor should be applied for all energy ranges. I don't know if they also changed the time period. I don't think so.

Maybe, Scott, you can fill me in here, but one of the things that troubled me a little bit

by the response is that it says that there was a document, they reference an SRDB document that is a reference in the TBD that indicates why they did what they did.

And I guess I was troubled by that because the reason that they put together a Technical Basis Document is to give guidance to the dose reconstructor and it shouldn't be up to the dose reconstructor to have to go back to another reference within there to verify that what they are doing is correct, and so I just didn't really understand that portion of the response. Now if --

MR. SIEBERT: Well, and that's exactly the reason that the TBD was subsequently updated was to reflect the better information that was determined.

MS. BEHLING: Okay, alright. Yes, I just didn't -- I hope that -- I mean the dose reconstructors have enough to deal with, you know, I didn't think that you were trying to say that they should be going to other references to try to pull

out the data, everything should be very clear to them in the TBD.

MR. SIEBERT: Yes.

MS. BEHLING: Okay.

CHAIRMAN KOTELCHUCK: Shouldn't this be an observation?

MS. BEHLING: Well --

MEMBER MUNN: Not necessarily.

MS. BEHLING: I mean they did -- back at the time that we were reviewing this and that the dose reconstruction was completed the TBD stated that they apply the dose correction factor for 1960 to 1965 and only for the 30 to 250, so that's what we had to base our finding on.

CHAIRMAN KOTELCHUCK: Right.

MR. SIEBERT: Well, and once again this one was done in 2010 if I remember correctly. That was just prior to the time frame when we started doing the DR guidance documents to clearly define when we knew there were changes that needed to be made to the TBD that are not yet made.

I would guess this one probably falls

into that thought process of it's something the dose reconstructors knew to apply correctly, it was disseminated through our meetings and discussions with the site expert.

It's the kind of thing that would now be in a DR guidance document, however, we just didn't have the process in place when this claim was done.

CHAIRMAN KOTELCHUCK: Right. And that fits what we did for an observation earlier today, does it not?

MS. BEHLING: Now I think back then -- I think today that ORAU and NIOSH put a lot of this documentation in the files because that was something up front that we had requested.

But at the time I don't know that this information would have been available to SC&A, and, as I said, this was the guidance at the time and the TBD does represent site-specific information, so -- well, let's just --

MR. KATZ: Right. So I mean your findings on this, I mean your observation is

understandable, Kathy, but it is an observation in that they did have better guidance and they applied it here.

They just didn't have that available to you at that time.

MS. BEHLING: Right.

MR. KATZ: Right.

MS. BEHLING: Okay.

CHAIRMAN KOTELCHUCK: Alright.

MS. GOGLIOTTI: Now is the standard protocol now when a DR guidance document is used to include that in the files?

MR. SIEBERT: That is correct, it goes with the Dose Reconstruction Report.

MS. GOGLIOTTI: And so if we don't see it in a file that we've done within the last couple years and it should have been there would that be a finding?

MR. KATZ: Well, if they correctly -- regardless, if they correctly do the dose reconstruction it's a documentation issue not a dose reconstruction error or problem, right?

It's the same thing. It's not a defect in the dose reconstruction, it's a problem in the documentation.

MS. GOGLIOTTI: So that would be an observation then?

MR. KATZ: That would be an observation.

CHAIRMAN KOTELCHUCK: Yes.

MR. KATZ: Yes.

CHAIRMAN KOTELCHUCK: Okay. Close 0.1. 0.2?

MS. BEHLING: Okay.

MS. GOGLIOTTI: With the way this alphabetizes things it actually skips over to ten, but we'll get back to two.

CHAIRMAN KOTELCHUCK: Okay.

MS. BEHLING: So we're going to go to ten first?

MS. GOGLIOTTI: Is that okay?

MS. BEHLING: That's fine, whatever.

CHAIRMAN KOTELCHUCK: Sure.

MS. BEHLING: Okay, well, I was going

to ask about this. Alright, well I'm going to skip forward then to ten. So now we are getting into the finding where we identified that NIOSH omitted X-ray exam dose for 1981 and 1988.

Based on what we saw in the file we saw a PA and lat X-ray exam for 1981 and a PA exam for 1980 that do not appear to be in the IREP tables and we think NIOSH, they would agree with us on this, and just wondered how this gets classified, I guess as a QA issue and --

CHAIRMAN KOTELCHUCK: Yes, that's right, it's a QA issue and it was an error, so it's a finding.

MS. BEHLING: Okay. And if we move on to Finding 11, in this finding NIOSH had incorrectly labeled in the parameters of several of the IMBA files for electron emitters.

They were just in the file folder itself. They were marked as like FR-90 -- yes, absorption type S, but when we went into the file it contained cesium-137 and there were just a lot of files in there that were mislabeled.

It doesn't really have any impact, but it was just confusing to us and it was incorrectly labeled files, and NIOSH agrees.

CHAIRMAN KOTELCHUCK: Right.

MS. BEHLING: And I don't know how this error could be avoided.

CHAIRMAN KOTELCHUCK: And this is -- right, this is an observation with the QA.

MS. BEHLING: Yes. The only thing I will make mention of, we had a total of 13 findings in this particular case, and as Dr. Kotelchuck was mentioning earlier, hopefully to this dose reconstructor some of things were pointed out, because there were a lot of omissions and that type of thing, QA issues.

CHAIRMAN KOTELCHUCK: Right.

MS. BEHLING: So if we go on to Finding 12, NIOSH omitted potentially ingestion intakes. Again, we calculated the dose, it would have been 72 millirem, rather small, but NIOSH does agree that they should have included the ingestion doses.

CHAIRMAN KOTELCHUCK: Okay. That's a

finding certainly and closed.

MS. BEHLING: And we recommend closure.

CHAIRMAN KOTELCHUCK: Sure.

MS. BEHLING: Finding 13. Again, this was an omission of some information in the file. There was a whole-body count for 1992 and it wasn't analyzed for missed dose.

It would have resulted in 3 millirem, but it was not even identified, and NIOSH agrees, and it's a small impact.

CHAIRMAN KOTELCHUCK: Right, yes. Closed. Now are we going back to two, three, and four?

MS. BEHLING: Yes. It was just that, it's the way it filters it.

CHAIRMAN KOTELCHUCK: Okay. No, that's fine. Although this is really -- I have not seen 13 findings on a case before, but that may be my limited tenure in this work relation.

MS. BEHLING: Yes, I don't think there are very often 13 findings, but --

CHAIRMAN KOTELCHUCK: Right. Well --

MEMBER MUNN: We've had as many as 25 findings.

CHAIRMAN KOTELCHUCK: Oh, well, that's good, but not good to hear.

Okay, let's go on. Two?

MS. BEHLING: Okay. To go back to 348.2, in this case, again, it was an omission of 30 millirem for a recorded photon dose in 1973 and, again, I think NIOSH agrees that this was an omission.

CHAIRMAN KOTELCHUCK: Yes.

MS. BEHLING: And, again, I'm just curious, does this information get transferred over and how -- I was just curious from NIOSH's point of view how this does get omitted?

I know it's a minor dose, but you do start to question, you know, how these don't get into -- there used be a file, an Excel file, that was sent over to the dose reconstructors, you know, in the early days, and the first think I think the dose reconstructor would do on the external side

is verify the records were consistent with what file he got from the data input people. Is that still happening?

MR. SIEBERT: Looking at -- once again this was done in 2010 and it's in the best estimate PoC range, so without looking specifically at it I believe that would be the time frame where there wasn't an NTS-specific best estimate tool, so all the information for each of the different cancers would need to be separately added into each tool.

It's just a -- it's a difficulty that we had at that time because we didn't have a best estimate-specific tool at the time. So by no means am I excusing the fact that the data is not there, but due to the fact that it's a tool that would have to be -- how should I say it, tailored for the specific site for a best estimate case, it's more understandable that an entry could be missed like this.

CHAIRMAN KOTELCHUCK: Yes.

MS. BEHLING: Okay.

CHAIRMAN KOTELCHUCK: Alright, let's

close that and go on to three.

MS. BEHLING: Okay. Here, again, this is the same as the previous finding, or previous case, and this had to do with this dosimeter correction factor and applying a 1.25 for the entire time period of '56 and '59 and -- or '56 through '59 when the TBD says '60 through '65, and it was applied to, I think in this case, only to 30 to 250 keV, but I think that that was explained earlier, that this was guidance that they were changing and the dose reconstructors were aware of it but it hadn't made it into the TBD yet.

So I guess this probably becomes an observation if we are consistent with what we did earlier.

CHAIRMAN KOTELCHUCK: Yes, yes.

MS. BEHLING: Okay.

CHAIRMAN KOTELCHUCK: Okay.

MS. BEHLING: Alright. To go on to Finding 4 for this case, we initially thought that NIOSH omitted a 1980 reported beta dose.

NIOSH responded by saying that they

went into the records and looked at this closer, because we saw 230 millirem of recorded beta dose and it happens that this individual was monitored by Florida Power & Light and this dose came from work that he must have done for Florida Power & Light.

So we realize this does not have to do with the NTS work and so we can see that this issue and that NIOSH is correct.

CHAIRMAN KOTELCHUCK: Right. So this is an observation.

MR. SIEBERT: Well this is the question I would have on this one, would this be a removal of the actual finding itself rather than an observation because this is --

MR. KATZ: Yes, that's right. This is a finding that gets withdrawn, Dave.

CHAIRMAN KOTELCHUCK: Ah, oh, right, okay, yes. Closed. Okay, 0.5. You're right, you're right.

MS. BEHLING: Okay, alright. If we go on to Finding 5, in this particular case NIOSH did

not use the recommended electron/photon ratio value for 1963.

They used an electron/photon value of one for atmospheric testing instead of the 1.04 for 1963. However, when you go into the IREP I believe the IREP was correct, but the statements in the TBD were incorrect I believe.

CHAIRMAN KOTELCHUCK: By the way, my screen doesn't reflect 0.5. We're on 0.5 now, right?

MS. BEHLING: Yes.

MS. GOGLIOTTI: Well my screen does. I wonder if it's frozen there.

CHAIRMAN KOTELCHUCK: Yes, that's --

MS. BEHLING: No, we're not seeing that, Rose.

MS. GOGLIOTTI: Okay, let me try again here.

CHAIRMAN KOTELCHUCK: There's five, thank you.

MS. GOGLIOTTI: One second, I disconnected.

CHAIRMAN KOTELCHUCK: Sure.

MS. GOGLIOTTI: I'll reconnect here.

CHAIRMAN KOTELCHUCK: There you go. Thank you.

MS. GOGLIOTTI: Okay?

CHAIRMAN KOTELCHUCK: Yes, sure.

MS. BEHLING: Okay. Let me see here, let me regroup.

CHAIRMAN KOTELCHUCK: Sure.

MS. BEHLING: Okay. SC&A found that NIOSH used an electron to photon value of one for atmospheric tests instead of 1.04 for 1963 for underground tests.

Atmospheric tests were not conducted after 1962, but I believe, as I started to say, the IREP input was correct, so I think that one we just didn't realize what they had done, but once we looked further the IREP is correct.

CHAIRMAN KOTELCHUCK: Yes.

MS. BEHLING: But then we go on to say that the electron to photon method to assign a beta dose for 1970 rather they used -- I'm sorry, they

used an electron/photon ratio for calculating the dose for 1970 when there was actually a measured beta dose and that should have been used, and NIOSH agrees.

It's a very, very small dose, again, 7 millirem, but they do agree that they should have assigned the measured dose rather than using the electron to photon ratio.

CHAIRMAN KOTELCHUCK: Right. Okay.

MS. BEHLING: And that can be closed. And if we go on to Finding 6, here, again, NIOSH applied an incorrect dosimeter correction factor for 1980.

The NTA film dosimeter correction factor of two, they incorrectly used a dosimeter correction factor of two for the TLD dose recorded in 1980. Again, it would have very little impact on this case.

Now let me see. Okay, NIOSH does agree that that was incorrect, a minor error and we recommend that it can be closed. And shall I go on?

Okay. Finding 7. Here NIOSH did not assign missed dose for the period of 1956 through 1965, didn't assign all of the missed dose.

They counted 384 zeros, but they only assigned missed dose for 284 zeros, and so there was omission of 2.6 rem in this particular case, and I believe NIOSH does agree with our finding. Now --

CHAIRMAN KOTELCHUCK: I got cut off, I'm back on the line. Dave.

MS. BEHLING: Okay, would you want me to repeat Finding 7?

CHAIRMAN KOTELCHUCK: No. The other folks have listened to it and that's --

MS. BEHLING: Yes. The only question I have, now that I'm going through this, there was some missed dose that wasn't assigned for the time period of 1956 through 1965 that resulted in the omission of about 2.6 rem.

So I guess this would only have really a moderate impact on the total dose and I don't think it would change any compensation decisions,

and so NIOSH agrees that this was an error but we are recommending closing it because it doesn't appear to make any significant change in --

CHAIRMAN KOTELCHUCK: Okay.

MS. GOGLIOTTI: Did you say 2.6 rem?

MS. BEHLING: That's what I'm reading here, 2.6 rem.

MS. GOGLIOTTI: And this is a skin cancer claim?

MS. BEHLING: Yes. I did not do this case. I am working through this now and I was also going to ask if NIOSH actually went in and looked at this or tried to recalculate the PoC for this one.

CHAIRMAN KOTELCHUCK: Yes.

MR. SIEBERT: I'll have to look at that.

MS. BEHLING: Okay, because we -- this is a skin cancer and it is at 46.5 PoC. I think we need to look a little further into this one.

CHAIRMAN KOTELCHUCK: Sounds good. So let's keep it open.

MS. BEHLING: Okay.

CHAIRMAN KOTELCHUCK: Eight?

MS. BEHLING: And I apologize for that. And Finding Number 8, again, NIOSH omitted missed electron dose for 1970 and 1973. Let's see here.

SC&A found that NIOSH only assigned seven missed electron doses and did not assign missed electron dose for 1971 and 1973, and it would be a modest dose I think, somewhere around 30 millirem that would be added.

Now let me see here, NIOSH states that this is consistent with OTIB-17, and I think what we are questioning here is if the NTS case, if the NTS site, if it really applies to, if OTIB-17 applies to the NTS site.

It's not specified in their appendices, and so I think we need to have some additional discussion on this regarding how you are going to calculate your missed electron doses.

The OTIB-17 appendices I think specify the gaseous diffusion plants, Hanford and Savannah River Site, and so would it be appropriate to

calculate these missed electron doses for NTS site also using OTIB-17, that's a good question.

MR. SMITH: This is Matt Smith with ORAU Team. I have not looked specifically at this one, but certainly from the description here I can see what's going on.

The OTIB-17 was written relatively early on in the project and NTS was probably not part of the mix when OTIB-17 was first drafted. Certainly you could, we could take a look at whether or not the TBD contains some references to OTIB-17.

But certainly what's going on here is the folks that are working the NTS claims are taking a look at the examples that we have for Savannah River and Hanford and the other sites, you know, and how to apply missed dose properly.

CHAIRMAN KOTELCHUCK: Yes. How about we come back to this next time?

MS. BEHLING: Okay.

CHAIRMAN KOTELCHUCK: We're going to be looking at seven anyway.

MS. BEHLING: Right. I think that

would be appropriate.

CHAIRMAN KOTELCHUCK: Okay.

MR. SIEBERT: Before we move on, this is Scott, I have looked at the claim, and the reason we didn't go back and determine the impact of these changes to the claim is because it was reworked about a year later and it was found to be compensable due to a new cancer.

CHAIRMAN KOTELCHUCK: Ah.

MS. BEHLING: Okay.

CHAIRMAN KOTELCHUCK: That's good and that actually addresses and issue that was in my mind, and that was when I see something like six, seven, eight findings do I have confidence in what was, and the dose reconstruction of that case, and the answer is no.

And my instinct is you should take a look at the case again even though SC&A proposed specific things, but there was no need to look back on this one because it's compensated at a later time.

MEMBER MUNN: Well for legitimate

reasons, it didn't have anything to do with this.

CHAIRMAN KOTELCHUCK: That's right, I understand that.

MEMBER MUNN: Okay.

CHAIRMAN KOTELCHUCK: But what I was going to say is when you have lots of findings like this it would make me feel much better if somebody, even after SC&A made its suggestions, for somebody to go out from NIOSH and just, if you could, start fresh on it, do it again blind, if you will.

MS. BEHLING: And you could go -- oh, I'm sorry.

MEMBER CLAWSON: Was this not even talked about, this OTIB-17, that it was done in the early years? Was that you that --

MR. SMITH: It's Matt Smith.

MEMBER CLAWSON: Oh, I'm sorry, excuse me.

MR. SMITH: That's okay.

MEMBER CLAWSON: Anyway, my question is, because being on the NTS I have seen the reference of using OTIB-17 on this, because I would

like to, I would kind of like to run this to ground and make sure that we're right in what we're doing.

DR. MAURO: Brad, this is John Mauro. I just joined the call, I got an email from Rose, and I hear you are talking of OTIB-17, it's a subject I am pretty familiar with.

I just joined one minute ago, so if there is anything I can do to help out, I'm not quite sure where you are going with this, if it has to do with hot particles or anything like that, but just to let you know I am here.

MS. GOGLIOTTI: Yes.

MS. BEHLING: And this is Kathy Behling, excuse me just a second, but, Brad, you just took the words out of my mouth, because I was going to say even if we realize that this case has been reworked and has been compensated because of an additional cancer, I would still, for SC&A's benefit and the Board's benefit, I assume, we would like to get an answer to the OTIB-17 and how it gets, whether it gets applied to the NTS site or if the TBD refers it to OTIB-17 or how you go about

calculating the missed electron dose.

CHAIRMAN KOTELCHUCK: Yes.

MS. BEHLING: I think I feel it should be an open item if you don't --

MEMBER CLAWSON: I would, because one of the reasons, just so you understand why, is because in part of process in closing up some of the Site Profile issues and so forth with NTS I know that it brought up OTIB-17 would be used.

MS. BEHLING: Right.

MEMBER CLAWSON: And I just want to make sure that we are, where we are at. I'd just like to run this ground if we could.

MS. BEHLING: Right.

CHAIRMAN KOTELCHUCK: Sure.

MS. BEHLING: I certainly agree. You know, the one thing I would suggest if you are in agreement with, Dr. Kotelchuck, is that the previous finding, seven, we were going to keep open to see the impact, I'm not sure if that's still necessary.

CHAIRMAN KOTELCHUCK: Ah.

MS. BEHLING: And that was the assignment of missed, the fact that the missed photon doses were miscalculated, or that the number of zeros were miscalculated, and it resulted in the omission of 2.6 rem.

I don't think that that's necessary to go back to that particular, keep it open for that particular finding because we obviously know the case has been compensated.

MR. SIEBERT: Yes, this is Scott. That's exactly why I went back. I thought we were talking about seven. We are closing that one out based on it had been compensated. I had --

CHAIRMAN KOTELCHUCK: Okay. That's a fair argument.

MR. SIEBERT: We are going to find further and give further description on what is done with OTIB-17 at NTS for Finding Number 8.

CHAIRMAN KOTELCHUCK: Alright, that's accepted.

DR. NETON: This is Jim. I think there is an active Work Group reviewing the NTS Site

Profile and I think this is one of the issues that we are dealing with right now, is the skin dose issues.

But I think is being addressed. I can't swear where, at point that it is in that, but I am reasonably certain that we're, it's under active discussion at this time.

CHAIRMAN KOTELCHUCK: Good.

MEMBER CLAWSON: But, Jim, I'm the Work Group Chair for NTS and that's why this was kind of sparking me into this, because this is one of the issues that we are working on this and I wanted to figure out where we were at on it, too, so, thank you.

DR. NETON: Yes.

CHAIRMAN KOTELCHUCK: Good.

MS. BEHLING: Okay, if you'd like I can go on. I'm --

CHAIRMAN KOTELCHUCK: Right. We have only Number 9 to go.

MS. BEHLING: Number 9, okay. That's right, last one. So in this particular case we

were dealing with missed external neutron doses and in the assignment of those doses for 1991 and 1992 NIOSH did not apply the ICRP correction factor and they agreed that they did not do that for those two years.

Again, I am not sure how that happened, but based on what Scott is telling us is that there wasn't an NTS best estimate workbook available, so perhaps that explains why that happened, but NIOSH does agree.

CHAIRMAN KOTELCHUCK: Okay. So that can be closed as well. And am I correct that that closes -- that doesn't close 348, 248 is finished for this part of the discussion.

We are going to come back to 0.8 later and a couple of those were changed to observations. One and three were, all were closed except one and three, which were changed to observations, which were closed.

MS. BEHLING: And we withdrew four.

CHAIRMAN KOTELCHUCK: And you withdrew four?

MS. BEHLING: Yes.

CHAIRMAN KOTELCHUCK: Okay.

MS. BEHLING: That was incorrect on our part.

CHAIRMAN KOTELCHUCK: Okay, good. I didn't have that down in my notes. Alright, we are moving along. It's just a little bit before 3:00. What would the next one be after 348, what case?

MS. GOGLIOTTI: We are actually switching matrices.

CHAIRMAN KOTELCHUCK: Pardon?

MS. GOGLIOTTI: We have to switch matrices into the DCAS cases, so that's what I am pulling up now.

CHAIRMAN KOTELCHUCK: Ah, the other BRS cases?

MS. GOGLIOTTI: Other DCAS cases.

CHAIRMAN KOTELCHUCK: Okay.

MS. GOGLIOTTI: And, John, you said you were on the line, this is the Allied Chemical Case, Tab 359.

DR. MAURO: Yes. I am in the process

of bringing up Tab 359, but that always takes time, and I did go through it this morning after we, you know, discussed that this may come up.

You might be able to help me. We could walk through each item that is still open and if you could just briefly -- I remember reading it this morning and coming to a certain position in my mind regarding each item that was still active.

So would you mind just helping me a little bit here and we could move through? A number of them I know have been closed.

MS. GOGLIOTTI: No.

DR. MAURO: But there are a couple that are still --

MS. GOGLIOTTI: They are all open.

DR. MAURO: Oh, I was reading -- well, let's go through them then one-by-one.

CHAIRMAN KOTELCHUCK: Well Allied Chemical was the first one.

MS. GOGLIOTTI: Allied Chemical, Tab 359, Observation 1, and this observation states that the DR Report could explain the use of a

definite factor post-1976, i.e. the reader should not be required to review and understand the workbooks in order to understand the basic assumptions that were used to reconstruct doses.

In addition, we would like to point out that we do not agree with the depletion rate of 1 percent per day.

DR. MAURO: I can speak to the 1 percent per day portion of it, the work portion. I believe it's likely one of our work specialists looked at, but with regard to the 1 percent per day that would be the rate in which, you know, activity declines by natural attenuation during the residual period.

And as we probably are familiar with, OTIB-70 now goes with 0.0067 per day as being the national attenuation rate, so I think that's what that particular issue was about on the 1 percent per day.

You know, so I'm not sure what NIOSH's position is regarding that, at least that aspect of it.

MS. GOGLIOTTI: Well NIOSH just says

here that a DR template was subsequently added or updated to reflect this information and a PER was issued.

DR. MAURO: Well that was the reason why I thought they were closed. Yes. So, you know, on that basis, you know, accepting that comment seems to be, you know, certainly acceptable.

CHAIRMAN KOTELCHUCK: Yes.

MR. KATZ: John, then -- I mean, I'm not sure why that is an observation because that would be a finding.

DR. MAURO: Oh.

MR. KATZ: Normally that would be a finding if it had substantive --

DR. MAURO: Yes.

MR. KATZ: -- on the dose reconstruction procedure and they agreed because they issued actually a PER to correct it.

DR. MAURO: Yes.

DR. NETON: Well, Ted, the only thing is that this, I think that this depletion factor

morphed in between the time that Allied was first, the issue was generated and OTIB-70 was modified, because OTIB-70 didn't get modified until --

MR. KATZ: Oh, no, what I am saying, Jim, is I'm not saying that they weren't, that this is -- I'm not saying that the procedures at the time didn't specify a 1 percent per day.

I'm just saying in the end of the day we agree that the science is better, that it shouldn't have been 1 percent a day, so, you know, that's a defect.

DR. NETON: Well --

CHAIRMAN KOTELCHUCK: But that wasn't --

DR. NETON: That's a change in the methodology. The dose reconstruction was done appropriately in accordance with the methodology.

MR. KATZ: I know, but we don't -- just to be clear, I mean it's not a question of, these DR audits are not a question of whether they simply did it according to procedure, they are also whether they are correct.

If they find science issues that are -- at the time the reviewed it they found science issues that they disagreed with they may get corrected in the meantime and so on, but that's still valid findings.

And those are actually, you know, part of what's really important about the dose reconstruction case reviews is also finding actual science issues that are wrong.

So it's not that they didn't go by the play book, but the play book wasn't correct.

DR. NETON: But this was also a finding in the Site Profile Review issue.

MR. KATZ: Right.

DR. NETON: I mean you get double hit to some degree. I mean -- but it's not, I mean it's not -- again, I mean this is not, the Site Profile is a completely different matter, but here with the case reviews we want to track how many defects a case has for each case.

And this, you know, clearly it's a defect, it's better science to have used the new

correction factor, that's why you changed it, I mean the depletion rate, that's why you changed it.

And that's sort of a classic case, you ought to have that as a finding. I mean, you know, we have discussed this so many times, this sort of issue, but this is, you know -- so it doesn't really matter that the play book was a certain way, the play book was wrong.

MEMBER MUNN: Yes, and a lot of discussion resulted from it.

MR. KATZ: Right, right. So I mean this is -- again, I just, I feel this is, again, it's a defect in the case and it should be, you know, so noted in the statistics.

DR. MAURO: Yes, Ted, the only -- I'm just trying to rethink. You are absolutely right, I'm trying to think about why I would have made it an observation.

It may have simply been because I knew that the issue had been resolved.

MR. KATZ: Yes. No, I understand.

DR. MAURO: Okay.

MR. KATZ: You know, I'm not, you know, blaming you, John, for labeling it observation. You know, on multiple occasions we've changed observations to findings, I'm just saying this is one of those where it properly should be changed to a finding.

MS. BEHLING: And this is Kathy Behling, I'm just going to interject my comment here that also let's remember this is a template and the Board has not reviewed the dose reconstruction methodology on most of the templates yet. I don't think I'd like to --

MR. KATZ: Okay, that's not an issue.

MS. BEHLING: That's a separate issue, I know.

MR. KATZ: Right. So let's just --

MS. BEHLING: Sorry.

MR. KATZ: I mean I would either resolve this, I mean, but --

MR. SIEBERT: And let me be clear on that, the template is not the implementing guidance in this case, this is Allied Chemical and it has

a TBD, so the TBD is what caused the PER.

MR. KATZ: Yes. That's fine, yes.

MS. BEHLING: Okay.

CHAIRMAN KOTELCHUCK: Okay.

MR. KATZ: So, anyway, Dave --

CHAIRMAN KOTELCHUCK: Yes?

MR. KATZ: -- again, you want to call the question for the rest of the --

CHAIRMAN KOTELCHUCK: Right, for a finding.

MR. KATZ: You may, but that's fine. But I mean I just think this falls squarely in the definition of finding.

CHAIRMAN KOTELCHUCK: Right. Folks, any comments or other --

MS. GOGLIOTTI: This is okay. I think that it should be labeled a finding.

CHAIRMAN KOTELCHUCK: Yes.

MEMBER CLAWSON: This is Brad. I agree.

CHAIRMAN KOTELCHUCK: Yes. Okay, so let's, we have a finding and we'll close it. Let's

go on.

MS. GOGLIOTTI: John, were you able to get it pulled up or do you want me to --

DR. MAURO: I am still working. I am working my way into the Board Review System now. But that was pretty brief, are they all like that? It sounds like it might be a good idea if you could just read it real quick and --

MS. GOGLIOTTI: Well, Observation 2 for that case.

DR. MAURO: Go ahead.

MS. GOGLIOTTI: The DR Report to better explain the DR process used in the workbook, in addition we'd like to point out that in Finding Number 6 of our review of the Site Profile it was concerned with the assumptions used to derive neutron doses, especially those pertaining to the duration of exposure, resulted in substantial underestimates of dose.

DR. MAURO: And what was NIOSH's response, if I recall it that was resolved?

MS. GOGLIOTTI: The explanation of the

DR process was based on the guidance provided in OTIB-12. The Dose Reconstruction Report did refer to the uncertainty section of TIB-12, which was the Monte Carlo methods for dose uncertainty calculations.

The neutron doses assigned for this claim were consistent with the Site Profile from October 2007, which was used at that time. The Site Profile was updated in 2014 and this revision, Rev 2, reflects the higher neutron doses to be assigned.

DR. MAURO: Yes. Yes, I recall going through that. So, in effect, NIOSH had, you know, made the appropriate revisions to that and then I guess I think I comment back, me, in light of that, it sounds like the issue has been resolved.

CHAIRMAN KOTELCHUCK: I think so, as a finding.

MEMBER MUNN: Finding?

MS. GOGLIOTTI: That was an observation. Would you like us to increase it to a finding?

MR. KATZ: Right, convert it.

CHAIRMAN KOTELCHUCK: Yes.

MS. GOGLIOTTI: Okay.

CHAIRMAN KOTELCHUCK: Okay.

MS. GOGLIOTTI: Then a third observation, NIOSH would consider assigning the same fractional intake for radionuclides other than uranium for AWE periods as well as what was done for the residual period.

NIOSH says per the SEC internal dose from non-uranium radionuclides during operational periods cannot be reconstructed, and we concur for the same reasons in 359.2, which we have not discussed yet.

CHAIRMAN KOTELCHUCK: Could you scroll on 359 on the Observation 3, or am I losing connection?

MS. GOGLIOTTI: I have it pulled up on my screen.

CHAIRMAN KOTELCHUCK: Okay. Lost connection, okay. Keep going, I'll try to find, get the connection back.

MS. GOGLIOTTI: Okay. So then I think it's okay if we were to close out with Observation 3 for the case review.

CHAIRMAN KOTELCHUCK: Yes, yes.

MEMBER MUNN: That makes sense.

CHAIRMAN KOTELCHUCK: Okay.

MS. GOGLIOTTI: Observation 4, the DR Report to discuss the possibility that the EEs may have been exposed to enriched uranium and how this might affect the dose reconstruction.

NIOSH says it's unlikely that the EE was exposed to enriched uranium because the material was brought in as an ore or concentrates of uranium assay and moisture content.

This material was reduced to various uranium oxide. Natural enrichment of uranium wouldn't seem to be present as described in the Site Profile.

And then, John, you came back and said a careful review of the Site Profile indicates that AACP received uranium concentration but did receive recycled uranium from Rocky Flats.

However, it appears that the RU was depleted uranium, hence the weight of evidence indicates that there is no enriched uranium that was handled and we recommend closing it.

DR. MAURO: Right.

MEMBER MUNN: Done.

CHAIRMAN KOTELCHUCK: Okay.

MS. GOGLIOTTI: Finding Number 1, I wrote missed photon dose for the colon was not consistent with the DR Report.

CHAIRMAN KOTELCHUCK: Folks, keep going ahead, I'm off and I'm having a hard time getting back on.

I don't know the meeting ID or entry code. Then it's just asking me for things that I hadn't recorded before, so please do go on. Let's not waste time.

Maybe, Wanda, would you just take over as Chair until I can get back online as our senior person?

MS. GOGLIOTTI: Okay. You should also be able to pull up the BRS if you can't get into

the meeting.

CHAIRMAN KOTELCHUCK: Right. That will take a few moments.

MEMBER MUNN: So this is Observation 3 we are talking about, right?

CHAIRMAN KOTELCHUCK: Yes.

MS. GOGLIOTTI: Finding 1 now.

CHAIRMAN KOTELCHUCK: Yes.

MS. GOGLIOTTI: We just closed Observation 4.

MEMBER MUNN: Observation 3 and 4. And now -- oh, I thought I was on your screen and I discovered I'm on my screen. That's why I was blinking once or twice.

MS. GOGLIOTTI: Okay, that's fine.

MEMBER MUNN: I guess as far as the recommendation I don't see any problem with it. Any concerns from anyone else?

MR. KATZ: Well this is a case, I think, is it not, Rose, where the DR was done correctly but the report description is incorrect?

MS. GOGLIOTTI: One second here.

MEMBER BEACH: That's a display error.

MS. GOGLIOTTI: Yes, that is correct.

MR. KATZ: Alright. So these we've been changing to observations.

MS. GOGLIOTTI: Oh, great, so we will do that for this one if that's okay with the Board.

MEMBER BEACH: Yes.

MEMBER MUNN: And no problem that I am hearing. Anyone?

MEMBER BEACH: No, that's appropriate.

MEMBER MUNN: If not, accepted.

CHAIRMAN KOTELCHUCK: Very good. I'm back again. Where are we at?

MEMBER MUNN: We are now picking up Allied Chemical 2.

CHAIRMAN KOTELCHUCK: Two, thank you.

MEMBER MUNN: 359.2.

CHAIRMAN KOTELCHUCK: Thank you.

DR. MAURO: Findings, okay. I finally got to the BRS and catching up to all you folks.

MS. GOGLIOTTI: Okay. And this finding states an incorrect acute intake

resuspension assumptions were applied.

CHAIRMAN KOTELCHUCK: Right.

DR. MAURO: And this was during the residual period, I believe. I'm opening up my response, and it was unusual, I believe, for the residual period, I'm catching up to you guys, to have, you know, spikes.

I'm reading my -- actually, I am looking at Scott's response and I believe this had to do with this acute resuspension during residual period.

Scott, you're on the line, is Scott there?

MR. SIEBERT: I am here.

DR. MAURO: Yes, Scott, I'm looking at the BRS right now and I see we had previously discussed this last year and I recall that the reason I was concerned here is we were in the residual period and we are looking at spikes, which is something you don't really ever see during a residual period.

And you had an answer here that I'm

reading again right now to try to respond to that, and it looks like it was because you were seeing spikes in the urine samples?

You're going to have to help me out a little bit here.

MR. SIEBERT: Yes, that sounds right. Well, what we did is we used the highest value as an overestimating assumption.

DR. MAURO: I see, okay, and let me keep going. And then I came back -- alright, yes, and my response was, you know, I guess if you want to go with the spike bounding approach, as you did, as long as the PoC was less than 50 percent, you know, going with the bounding approach probably is okay.

It's unusual to go with that, you know, looking at spikes, but if it turns out that's what you elected to do for expediency and the DRs, the PoC is still less than 50 percent I guess that's okay, if everyone else agrees with that.

CHAIRMAN KOTELCHUCK: Yes. Well, it's a bounding assumption and that's certainly

claimant-favorable.

DR. MAURO: Yes.

MEMBER MUNN: You can't be any plainer than that.

CHAIRMAN KOTELCHUCK: Absolutely. We have done this elsewhere.

MR. SIEBERT: So my question, would that be an observation then?

MEMBER MUNN: Oh, gosh.

MR. SIEBERT: Since there is nothing wrong with the approach?

CHAIRMAN KOTELCHUCK: That's correct, yes, nothing is wrong with the approach. It is very claimant-favorable, but it's an appropriately claimant-favorable -- yes, I think we should close it and make it an observation. Okay, let's go on.

MS. GOGLIOTTI: Okay. Finding Number 3 states that there is no evidence of raffinates removal.

DR. MAURO: Yes. No, I can help out a little. I'm tracking it now on the BRS and, yes, the issue had to do with whether there was any

exposure to raffinates during the residual period and I guess Scott's response was well, it was removed, the material was removed, there was no evidence of raffinates being onsite, and I went back after Scott indicated as such, and it's there on the BRS, take a look at Page 18 to 20 of SRDB-1237.9 and I agree, it certainly appears that way, and, therefore, in this case I was recommending that we close this finding.

CHAIRMAN KOTELCHUCK: Very good. And that we close it as an observation, or at least I would recommend observation on that.

MR. KATZ: Well, I'm just unclear whether this is a finding we are withdrawing or a finding that was actually an observation. Is there something, was there anything, any reason to have this finding then?

DR. MAURO: Perhaps I could help there. Until I read the SRDB, in other words when Scott -- when I had the original finding and then we discussed it Scott pointed out that there is evidence that, in fact, the material was removed

and he pointed in the direction of an SRDB, which I then had an opportunity to review and I said yes, it looks like you are right.

So I mean to -- that was the sequence of events that led to my realizing that yes, there is information, and that information was not in the report itself, the DR, but it was information that Scott, I believe, directed me to subsequently.

CHAIRMAN KOTELCHUCK: Right. It was appropriate that one check this out.

MR. KATZ: Right, right. No, I understand, that's --

CHAIRMAN KOTELCHUCK: And, therefore, it's an observation.

MR. KATZ: Right.

MEMBER MUNN: I am still having a little trouble with rewriting our descriptions of what the observations and findings are.

CHAIRMAN KOTELCHUCK: Yes.

MEMBER MUNN: You know, the reason we have a finding is because a qualified reviewer has looked at something and it doesn't make sense to

them.

Now the fact that it turns out that there was no harm, no foul doesn't change the fact that -- I mean, now we are saying that that's no longer a finding, it's an observation as long as everything is done all right.

MR. KATZ: Right.

MEMBER MUNN: I don't think that was our original description of observations and if we want to do that it's certainly within our privilege to do so, but it bothers me that we are changing our description of what constitutes a finding and what constitutes an observation.

MR. KATZ: Well, Wanda, that's true, but we changed it quite some time ago.

MEMBER MUNN: Really?

MR. KATZ: And it's based on the basic distinction that findings should relate to defects, not relate to problems with interpreting the dose reconstruction.

MEMBER MUNN: Well, that's -- okay.

MR. KATZ: So, I mean, we've, you know,

moved this direction a long time ago and it just, it keeps coming up as an issue, but I mean that change was made quite some time ago now.

CHAIRMAN KOTELCHUCK: Yes. There was nothing that was done wrong, therefore, changing a finding, and it was appropriate to check out whether the raffinate was there and it turns out it had been removed.

MEMBER MUNN: Now you don't need to re-explain it to me. I just --

CHAIRMAN KOTELCHUCK: Yes, okay, I'm sorry.

MEMBER MUNN: I am personally having a little trouble with that because to me it seems to me that it's a valid finding, but if that's what we have agreed to do and I am just, I'm not trying to hold up the train. Fine, I'm with you, go ahead.

CHAIRMAN KOTELCHUCK: Okay, fine. And other folks do you agree it's an observation?

MR. SIEBERT: Well this is Scott, I'm sorry, I hate to be a pain, but I would tend to think with Ted that this actually should be withdrawn

because the Site Profile did reference the Perkins document that we pointed to in our response.

DR. MAURO: Oh, yes, Scott, if that's the case, that is if that was material that you had provided originally in support of the DR and I did not follow up on it --

CHAIRMAN KOTELCHUCK: And it was overlooked?

DR. MAURO: -- and it was overlooked then I would agree that was something I should have caught. I should have followed up and confirmed, you know, as part of our review.

So what you just described would indicate that that's something that I should have checked myself and that would never have been brought to the surface.

So what you described in the case that, in the first place -- the comment should not have been made the first place given what you just said, Scott.

CHAIRMAN KOTELCHUCK: Is that what you are arguing, Scott?

MR. SIEBERT: Correct.

CHAIRMAN KOTELCHUCK: And --

MS. GOGLIOTTI: And that's a reference in the TBD that's clearly defined?

CHAIRMAN KOTELCHUCK: That's the question.

MR. SIEBERT: Well, it says in here, it's saying right here that "Site Profiles indicate the remaining sludge may have contaminated non-decayed uranium daughters was drowned and sent to a licensed radioactive facility."

I can't say specifically whether that reference is in the Site Profile or not. I'm guessing it probably is because that's where I would have pulled it from.

CHAIRMAN KOTELCHUCK: Well let's confirm that then. Let's leave it open and let's just confirm that.

MS. GOGLIOTTI: Well, how about --

CHAIRMAN KOTELCHUCK: Rather than saying it's likely it was there or it wasn't.

MS. GOGLIOTTI: How about if it is in

the TBD we'll withdraw the finding and if not --

CHAIRMAN KOTELCHUCK: That's correct. If it's in the TBD we'll withdraw it. But the question is, is it in the TBD and that we have to hold open until we get a chance to look at it.

MEMBER BEACH: Is NIOSH going to do that or both SC&A and NIOSH?

MS. GOGLIOTTI: SC&A can --

MR. SIEBERT: I'll do that.

MS. GOGLIOTTI: Okay.

MR. SIEBERT: No, okay.

(Laughter.)

CHAIRMAN KOTELCHUCK: Okay, so 0.3 is open and we'll check that before. 0.4?

MS. GOGLIOTTI: Okay. Finding 4 says implausible intake spikes were assumed during the residual period.

DR. MAURO: Oh, this is the same as the previous one. You know, and it actually indicates --

CHAIRMAN KOTELCHUCK: Yes, right.

DR. MAURO: It's the same issue where

--

CHAIRMAN KOTELCHUCK: That's correct.

DR. MAURO: And I believe in the -- so the response again is the same. If the PoC was less than a 50 percent a bounding approach is appropriate, if everyone agrees with that.

CHAIRMAN KOTELCHUCK: No, I'm just, we haven't -- that's not Finding, that's not 0.3, we're talking about 0.2.

DR. MAURO: Oh, I thought --

MR. KATZ: Yes, he's talking about Number 2.

CHAIRMAN KOTELCHUCK: Yes, the same response as 0.2. There it is, okay.

MR. KATZ: Yes.

CHAIRMAN KOTELCHUCK: And we closed it as an observation.

MS. GOGLIOTTI: Okay.

CHAIRMAN KOTELCHUCK: Okay.

MS. GOGLIOTTI: That was the last of the Allied Chemical case.

CHAIRMAN KOTELCHUCK: Good.

MS. GOGLIOTTI: We are really moving here.

CHAIRMAN KOTELCHUCK: Yes.

DR. MAURO: I'm going to break away. Thank you for inviting me and I was hopeful I was helpful.

CHAIRMAN KOTELCHUCK: Sure. Well, we have -- let's just say this. We need to be, we have a few more minutes and then we have to, before folks have to go at 4:00, it wouldn't be terrible to leave a minute or two before, but we can probably take another case.

So could we do ANL-East in the next ten or 15 minutes?

MS. GOGLIOTTI: Yes, I don't think that should be a problem.

CHAIRMAN KOTELCHUCK: Okay, let's do that, and then we'll decide on our next meeting and call it, finish for the day.

MS. GOGLIOTTI: Okay. This is ANL-East, Tab 342, Finding 1, and the findings are that NIOSH used the incorrect LOD value for 1989

and that impacts missed photon dose to the prostate.

Here NIOSH agrees with us. They use an LOD of 25 millirems and it should have been ten, and this, of course, overestimate, and that was caused by the workbook actually and the tool has subsequently been updated and there is no need for use of the tool anymore.

CHAIRMAN KOTELCHUCK: That sounds like a clear finding and we can close it.

(Simultaneous speaking.)

MS. GOGLIOTTI: -- claimant-favorable. Okay.

CHAIRMAN KOTELCHUCK: Sure.

MS. GOGLIOTTI: 342.2, NIOSH used an NTA film correction factor for 1989 through 1990 TLD readings, and this impacts missed neutron dose assignments.

Here NIOSH agrees with us, again, and they used an NTA correction factor that was too high, so it was claimant-favorable and we would recommend closing this finding.

CHAIRMAN KOTELCHUCK: Sounds good.

MS. GOGLIOTTI: The same case, Finding Number 3, NIOSH used the incorrect MDA conversion and this impacts missed plutonium dose.

Here NIOSH disagrees with us. They say that the TBD refers to Page 26 and a table, and the bioassay in question was collected in 1989.

The MDA, according to that table is 0.033 dpm per liter, and that matches what was used in the DR. Alright. And we agree with them, NIOSH did use the correct MDA and so I would recommend that we withdraw the finding.

CHAIRMAN KOTELCHUCK: Okay, we should close it and it should be -- since it was correct it should be an observation.

MR. KATZ: No, no, it's a withdraw.

MEMBER MUNN: Yes.

MR. KATZ: Dave, it's a withdraw as Rose suggested.

CHAIRMAN KOTELCHUCK: Let me -- I'm not quite clear.

MR. KATZ: The finding was wrong so

they are withdrawing the finding.

MS. GOGLIOTTI: It appears that they we were using the wrong table in the TBD, which has a different unit.

CHAIRMAN KOTELCHUCK: Ah, okay. Okay, withdrawn. Okay, go ahead.

MS. GOGLIOTTI: Okay. And the last one on this case, Finding Number 4, NIOSH used one-half the MDA value instead of intake value in the CADW, and this impacted missed fission product dose used for calculating strontium-90 in the OTIB-54 tool.

MR. KATZ: Rose, something happened to the phone, and I don't know about anyone else, but I couldn't hear anything you said for the last 30 seconds.

MS. GOGLIOTTI: Oh, I'm sorry.

MR. KATZ: Oh, it's not -- I don't think it's your phone, but something broke in.

MEMBER MUNN: Yes, I think that's correct. I don't think it's her phone either. I certainly heard it.

MS. GOGLIOTTI: Okay. Well in this finding NIOSH agreed with us. They used an intake of 11.6 dpm per day instead of 46.8 dpm per day, which was an underestimated dose.

When they did correct it the PoCs did change, but not significantly. It went from 47.4 to 47.46, and so essentially NIOSH agrees with us, but it did not impact the overall compensation decision and we would recommend closing this finding.

MR. KATZ: Dave, are you still with us? Maybe that was Dave losing his connection, I don't know. Dave are you with us?

CHAIRMAN KOTELCHUCK: I am back again, I got cut off. My phone line got cut off.

MR. KATZ: That's okay. So, Dave, Rose just went through Finding 4, which is an error. NIOSH agrees with the error, it has a minor effect on PoC, increasing it in a minor way.

It doesn't change the result of the case, so she has recommended closing it, it's a positive finding.

CHAIRMAN KOTELCHUCK: Good, okay. Thank you. Alright, so it's -- I don't know, we have another five or ten minutes. What's AOO, which is, by the way, what, AOO?

MS. GOGLIOTTI: I believe that is Albuquerque Operations Office.

CHAIRMAN KOTELCHUCK: Ah-ha, okay. Can we go through that in the next ten minutes or so? I don't know, I --

MS. GOGLIOTTI: We'll see. I didn't plan on making it this far. We've gone through around 80-plus issues.

CHAIRMAN KOTELCHUCK: Right. We have gone through many issues, you are quite right, and that's fine. Well, what do we have on AOO, how many findings do we have on it?

MS. GOGLIOTTI: We have one observation and six findings.

CHAIRMAN KOTELCHUCK: I think, folks, we are, Folks are getting tired. I am not quite as sharp as I was at 10:30 this morning, so I would suggest that at this point we simply, we leave --

we will start with AOO next time if folks agree and let's plan the next date for our meeting.

Next Meeting Date

MR. KATZ: So if you guys want to pull out your calendars, and we don't have David with us, but we'll check these dates with him whenever to make sure that we are not leaving him out.

CHAIRMAN KOTELCHUCK: Good.

MR. KATZ: That's David Richardson. So here are possible dates, just a possible date, would be the week of July 25th. The other thing is we don't have Grady on and I don't want to leave him out again.

MR. SIEBERT: This is Scott. I can tell you I can't make that, I am out of town that whole week.

MR. KATZ: Okay. Well then so that's great, because that makes it easy. Okay, so we're not doing then. So then the next possible week is the week of August 15th.

CHAIRMAN KOTELCHUCK: August what?

MR. KATZ: We don't want to do right

before a Board Meeting, I don't think.

CHAIRMAN KOTELCHUCK: That's right, that's correct. Wait a minute, our Board Meeting is --

MR. KATZ: The 9th and 10th.

CHAIRMAN KOTELCHUCK: Right.

MR. KATZ: So I would suggest August 15th, the week of that as a possibility.

CHAIRMAN KOTELCHUCK: August 15th I am definitely out the entire week. That's my week --

MR. KATZ: Okay. What about the week of the 22nd?

CHAIRMAN KOTELCHUCK: Folks, what about the week of the 22nd? I'm a bit prejudiced against late August meetings, but I would rather --

MEMBER POSTON: Are you talking about August?

MR. KATZ: Yes.

CHAIRMAN KOTELCHUCK: You know, let's, okay, the last week in August is possible.

MR. KATZ: Well, that's the second to

last week, right, August 22nd. Is that --

CHAIRMAN KOTELCHUCK: Oh, you're right it is the second. It doesn't matter. Let's just see. I think a lot of people are on vacation, but let's actually check it out.

MR. KATZ: Well --

CHAIRMAN KOTELCHUCK: I am available that week.

MR. KATZ: Yes, so am I.

MEMBER POSTON: If you do it on the 22nd or 23rd that's fine. We have a faculty retreat on the 24th and 25th.

MR. KATZ: Okay. So the 22nd and 23rd, does that work for everyone who is on the line?

Okay. And then how about, let's just have some more options because we want to check with Grady and also with --

CHAIRMAN KOTELCHUCK: Let me suggest, given the time of year, let me suggest Tuesday the 23rd is our first choice rather than the Monday, rather than Friday or Monday.

MR. KATZ: Right, I agree.

CHAIRMAN KOTELCHUCK: And then Monday will be our backup, and let's see what we can do for other days. What's the 24th or 25th like?

MR. KATZ: Well that doesn't work because John Poston just explained to us --

CHAIRMAN KOTELCHUCK: He said 24 is no good, what about 25?

MEMBER POSTON: No, it's 2-day retreat.

CHAIRMAN KOTELCHUCK: Oh, okay, fine.

MR. KATZ: Yes, so let's just go to the next week, what about the week of August 29th?

MEMBER POSTON: We can't have it on the 30th, that's [identifying information redacted] birthday.

CHAIRMAN KOTELCHUCK: Oh, yes, sure. Hey --

MR. KATZ: Okay. What about the 31st and September --

CHAIRMAN KOTELCHUCK: Are you sure that's not [identifying information redacted] birthday?

(Laughter.)

MR. KATZ: How about the 31st and September 1st?

CHAIRMAN KOTELCHUCK: Let's take a look.

MEMBER BEACH: Yes, I'm out the whole week. I just checked.

MR. KATZ: Okay, that's fine. Then let's just go to the next week, the week of September 5th.

MEMBER BEACH: Holiday, Labor Day on the 5th, but other than that I am clear.

MR. KATZ: Okay, so --

CHAIRMAN KOTELCHUCK: The 5th is Labor Day?

MR. KATZ: Yes, so then let's not do the 6th either with people --

CHAIRMAN KOTELCHUCK: Right. I think that's true.

MR. KATZ: How about the 7th, 8th, 9th?

CHAIRMAN KOTELCHUCK: Hold it just a minute. I have something I believe on the 7th and

8th. Hold it. Seventh and 8th, yes. I am tied up the 7th and 8th.

Possibly I could -- no, I am. Pardon me. I can do the 9th.

MR. KATZ: Okay. September 9th, that's a Friday, is that okay with other folks?

MEMBER POSTON: Yes.

CHAIRMAN KOTELCHUCK: It's not summer vacation time.

MR. KATZ: No.

MEMBER POSTON: What?

CHAIRMAN KOTELCHUCK: It's not summer vacation time.

MEMBER POSTON: Oh, that's --

CHAIRMAN KOTELCHUCK: Hey, after Labor Day we're back at work, folks.

MR. KATZ: Okay, right. So September 9th is another option I'll put out there as a second option. And then I really need another, I mean David Richardson is tough, so --

CHAIRMAN KOTELCHUCK: Yes, he is.

MR. KATZ: -- let's just try, what

about the week of the 12th, the 12th through the 15th of September?

CHAIRMAN KOTELCHUCK: Okay, the 12th --

MEMBER POSTON: Good.

CHAIRMAN KOTELCHUCK: I am busy the 12th.

MR. KATZ: Okay. Thirteenth through 15th?

MEMBER BEACH: I am good any of those days. Not the --

MEMBER CLAWSON: The 13th would be best for me.

CHAIRMAN KOTELCHUCK: The 13th would be fine for me.

MR. KATZ: Okay. And, John?

MEMBER POSTON: It should be. I think I have class from 8:00 to 9:50.

CHAIRMAN KOTELCHUCK: We can work around, work with that as you have done before.

MR. KATZ: Right.

MEMBER POSTON: Yes.

CHAIRMAN KOTELCHUCK: Why don't we call Tuesday the 13th then the next backup?

MR. KATZ: Okay. So we have three options, four dates as options and I'll send those out to both Grady and to David Richardson.

CHAIRMAN KOTELCHUCK: Okay, that sounds good.

MEMBER BEACH: Can you go through them again, I got --

MR. KATZ: Alright, let me go through them again. So our first choice is the 23rd of August, the second would be the 22nd, then after that September 9th, and after that September 13th.

MEMBER BEACH: Okay, thanks.

MR. KATZ: Okay.

CHAIRMAN KOTELCHUCK: September 9th and then September 13th, good.

MR. KATZ: Yes, let's hope at least one of those works for David and for Grady.

CHAIRMAN KOTELCHUCK: Yes, hope so. Okay, folks, thank you all very much, and have a good rest of the day.

MR. KATZ: Yes, thanks everybody.

CHAIRMAN KOTELCHUCK: Sure. Bye.

(Whereupon, the above-entitled matter went off the record at 3:32 p.m.)