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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THURSDAY
APRIL 28, 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
DAVID B. RICHARDSON, Member

ALSO PRESENT:

TED KATZ, Designated Federal Official
NANCY ADAMS, NIOSH Contractor
DAVE ALLEN, DCAS
KATHY BEHLING, SC&A
LIZ BRACKETT, ORAU Team
NICOLE BRIGGS, SC&A
RON BUCHANAN, SC&A
DOUG FARVER, SC&A
ROSE GOGLIOTTI, SC&A
STU HINNEFELD, ORAU Team
JOHN MAURO, SC&A
SCOTT SIEBERT, ORAU Team
MATT SMITH, ORAU Team
JOHN STIVER, SC&A

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

(10:33 a.m.)

**WELCOME AND ROLL CALL**

MR. KATZ: We'll begin with roll call, but let me just note for anyone in the public that the agenda is on the NIOSH website under the EEOICPA section, the OCAS section for scheduled meetings, today's date.

But there are really no substantial materials available for the public, because we're talking about cases here. Let me do conflict of interest. And I'll just run through those.

(Roll call.)

MR. KATZ: Okay, Dave. It's your meeting.

**CASE REVIEW ISSUE RESOLUTION FOR SETS 10-13**

CHAIRMAN KOTELCHUCK: Okay, very good. You all have the agenda. And first item on the agenda is one of the two remaining unreviewed cases from Sets 10 through 13. Folks probably remember that Sets 6 through 13 were Cases 101 to 334, 234 cases. Two were not reviewed, and this is one of

them, because they were awaiting further action.

MS. GOGLIOTTI: Correction. We did review it. We didn't review two cases, but this is the case we reviewed. We just haven't finished the resolution yet.

CHAIRMAN KOTELCHUCK: The question is whether this --- I thought this was one that was not included in our report to the Secretary.

MS. GOGLIOTTI: No, it is included.

CHAIRMAN KOTELCHUCK: It is included, alright. Well, maybe you should present, and I'll check my notes, or whomever is to be presenting on this.

MS. GOGLIOTTI: Okay. Is John Mauro still online?

DR. MAURO: Yes. I'm online. And if you folks are ready to go with Coppers, Tab 282, I'd be glad to go through that quickly.

CHAIRMAN KOTELCHUCK: Very good.

DR. MAURO: Okay. Coppers is an AWE facility. And it basically did uranium conversion. There was a DR review done by NIOSH

in 2007. SC&A reviewed it and prepared its report in February 2011. And it was discussed at a September 24th, 2015 Subcommittee meeting.

The essence of the Subcommittee meeting was that our concerns were that, at the time that NIOSH performed the DR, it relied heavily on TBD6001. This is a generic TBD that applies to all uranium conversion facilities.

It turned out, in the interim, between the time when NIOSH performed its DR and when we reviewed it and then met, TBD6001 was withdrawn.

So it left us in a position where we really couldn't -- because the dose reconstruction itself, you know, presented its doses and said it was based on TBD6001, our position was, well, you know, it's hard for us to say anything about it, because now that TBD6001 no longer exists we basically need to go back to first principles, which is the source document for TBD6001, Christofano and Harris.

And this was discussed during the September 24th, 2015 meeting. The Subcommittee

asked SC&A to go ahead and write it up, you know, write up its, what you would call first principle evaluation going back to the source document, Christofano and Harris.

And we did that. And we submitted our report to the Subcommittee on October 6th, 2015. And we explained that we had two issues. I wouldn't call them findings. We just had two things that we thought it was important that we discuss. And we wrote that up. And you have the report. It's been there.

And then on April 26th, the day before yesterday, David Allen prepared a response to the two issues. And I did have a chance to review it carefully. And thank you, David, for sending it. It does, bottom line, it does address our two concerns. And for the reasons I will briefly describe, we are recommending closing those two items in favor of NIOSH.

Let me briefly explain what they are, so we can get that on the record.

CHAIRMAN KOTELCHUCK: Yes.

DR. MAURO: The external dose basically, in our view, consisted of two elements. One was the worker might stand close to a 55 gallon drum containing various types of uranium, uranium oxide, yellowcake, UF4, and as a result, experience some external exposure.

We went ahead and calculated the doses that a person might experience by spending some time next to the container. The doses we came up with were not unlike the numbers reported originally by NIOSH. Three hundred and seventy-one millirem was the external dose.

By the way, the worker was not --- he had a -- the point, you know, [was] that the worker himself did a lot of types of jobs. He was not necessarily a radiation worker. But he had jobs which may very well have brought him into areas where there was the potential for exposure.

So, you know, there's a lot of ambiguity about, well, how much time would he have spent next to a drum, et cetera, et cetera. Bottom line is that the number that we found is compatible, when

we did our calculations, with regard to standing next to or close to storage drums.

And we came up with numbers that were comparable to NIOSH's, which was 371 millirem. And that was explained nicely, and we agree with that. But we had a separate issue that we brought up that had uniquely to do with the conversion of UF4 to UF6.

When you read Christofano and Harris, the way you do that is you pass anhydrous fluoride as a gas over UF4. And it converts it to UF6 which is a gas that then leaves, the UF6 leaves. And what it does it leaves behind an ash which contains thorium-234, concentrated.

And under that process, the external exposures could be substantially higher, very high. And we basically raised the question in our report: has NIOSH addressed this issue or looked into it?

And in David's report that we reviewed the other day, he explained that it turns out that the type of process that was used to generate UF6

did not use the anhydrous fluoride approach. It used a different approach which did not generate this ash and therefore the ash issue goes away. And we accept that.

The only thing we would suggest is, for the purpose of the record, David, the source of the information regarding this technique that was used at Coppers, one that I was not at all familiar with, you know, when I reviewed Christofano and Harris, the basis for that, it would be helpful to have had a reference. So we sort of closed the loop on that one.

But we accept that. I believe that that very well was the case, especially since this was a pilot plant doing experimental work. So I leave that just as an offering. But I still recommend that this item be closed. Because there seems to be a reasonable explanation. And so therefore, our external exposure issue goes away.

Before I move on to internal, is there anything about that, David, you'd like to add, or if anyone has any questions?

MR. ALLEN: I think the only thing I wanted to add is I'm sorry about not including that reference. But I will point out the very last thing in the email is an SRDB number. And that is the reference where I got the ---

DR. MAURO: Oh, okay. I appreciate that. Thank you. On internal, one of the --- bear in mind, you know, at the time the DR was prepared, the reference was simply to TBD6001. And there really wasn't very much detail on, you know, how NIOSH, actually what numbers were used and what assumptions were made, that type of thing.

So what we did is we went back and said, okay, if we were going to be doing the dose reconstruction, internal, for this worker, we'd go look at the data in Christofano and Harris. And when you look at Christofano and Harris, it says that, well, typically at a uranium conversion facility that does a wide range of conversions, a median value of the air dust loading would be 100 dpm per cubic meter.

But if you're working with uranium

conversion, it could be much higher than that, at least 1000 dpm per cubic meter. And we simply pointed out in our report that, you know, to what degree did NIOSH, you know, take that into consideration in doing the internal exposure.

And David got back to us. And he says, John, you're right, in fact, we did do that. We did take into consideration that. And they used an airborne dust loading at an associated intake rate that was at the high end of -- well, let me put it this way, it was at the high end of a typical uranium conversion facility, sort of at the low end of the UF6 conversion aspect of a uranium conversion facility, but within the range.

And, you know, one could argue that, well, you know, you sort of used a value that was closer to the lower end of the airborne dust loading range for UF6. But I'm okay with that. Because first of all, remember, this worker was not a uranium worker. He may not have even been in the area where there was UF6 conversion going on for extended periods of time.

But nevertheless, they assume that he was in the area for 44 hours per week. So when you put all that together, I consider the approach that NIOSH used to reconstruct internal exposures, when explained, to be reasonable, appropriate, and claimant-favorable. So on that basis, I'm recommending that we also close that second issue dealing with internal exposures.

CHAIRMAN KOTELCHUCK: Very good. Any comments, David, or anybody, David Allen or anybody else? Or questions from members of the Subcommittee?

MEMBER MUNN: None here.

MEMBER RICHARDSON: None from me.

CHAIRMAN KOTELCHUCK: Alright.

MR. ALLEN: This is David Allen. We agree with John that it was reasonable and appropriate.

CHAIRMAN KOTELCHUCK: Right. Okay.

DR. MAURO: And, David, thank you so much for sending that over. It really did the trick.

CHAIRMAN KOTELCHUCK: Yes, it was very helpful. Alright. Well, then it seems to me that I also agree that this appears to be appropriate to close now. So let's say that I think the consensus of the group is to close this, right? [PAUSE]

Okay. That takes care of this item. There is, I believe, still one more case outstanding that we haven't dealt with. I'm trying to remember, besides the Coppers', there was one other, yes, there was one other.

MS. GOGLIOTTI: There is one other. That case is waiting on an action by the AWE Work Group. And that Work Group has not met in some time.

CHAIRMAN KOTELCHUCK: A-ha. What case number is that or what company?

MS. GOGLIOTTI: Oh, I can pull it.

CHAIRMAN KOTELCHUCK: I don't have it in front of me.

MS. GOGLIOTTI: 308, which is Bridgeport Brass.

CHAIRMAN KOTELCHUCK: Okay. Good, good.

MR. KATZ: Okay. Rose, thanks for mentioning that. Because Bridgeport Brass, I do not recollect that there's an agenda item for the Work Group on Bridgeport Brass. So let's, why don't I follow-up with you after this meeting next week on that case, so I can make sure the Work Group addresses whatever it is that's outstanding on Bridgeport Brass.

It won't be meeting until this summer, but it has quite a bit of other business. And then we'll make sure that's covered, too.

MS. GOGLIOTTI: Oh, I'm sorry. Actually, that was the wrong case. That's the Hooker case.

MR. KATZ: Oh, okay. Thank you. That makes sense. Because I wasn't even sure that Bridgeport Brass was covered by them. But, Hooker, yes. Okay. So that should get addressed this summer.

CHAIRMAN KOTELCHUCK: Okay. That's

good. And that will be the last one from Sets 10 through 13. And that will completely finish the work there.

The second item is really getting back to our main area of business, which is going to the next sets, 14 through 18. We've started on 14. We started with Oak Ridge and completed that last time.

And before we get back to that main business, I just wanted to report to members of the Subcommittee that, after our last board meeting, I completed all the changes in the Secretary's report that were recommended by the Board and forwarded those to Jim and cc'd Ted.

And it seems to me now, I consider that now this leaves our Subcommittee and goes on to the --- it's a larger Board function. Our Subcommittee work is finished. I didn't cc everybody in our Subcommittee with that last report. But I just wanted you to know that it went in as directed by the Board meeting, to the best of my understanding.

So that's --- we will hear from Jim at some later point on that as far as where we go next, whether we have a Methods Subcommittee meeting or whatever.

MR. KATZ: Yes. And then, this is Ted, I'm pretty sure that's what the next step would be. Jim was going to do some drafting related to this material that's really more the Method's turf rather than the Subcommittee's turf. And then we will need a Methods Work Group meeting. So I'm sure it'll get discussed there.

CHAIRMAN KOTELCHUCK: Very good. Okay. So I just wanted to bring people up to date. Because I think, if I may say, our Subcommittee did a good job. We put out a report from our end that was accepted by the Board. And we have done our job.

**CASE REVIEWS ISSUE RESOLUTION FOR SETS 14-18**

Now, let's get back to our second item which is Sets 14 to 18. And according to my notes we finished on, and I have it, we finished on 402.1.

MR. SIEBERT: Dr. Kotelchuck?

CHAIRMAN KOTELCHUCK: Yes?

MR. SIEBERT: This is Scott Siebert. I apologize. I don't believe we actually --- I still had an action item from the Oak Ridge sites.

MS. GOGLIOTTI: Yes, that's correct. There's two still outstanding in that.

CHAIRMAN KOTELCHUCK: Oh, there is. Okay. I thought we had finished that. But then let's go back to those. And who should be leading off on that? And if you'll give us the case numbers?

MS. GOGLIOTTI: We do have Observation 1 from Tab 438.

CHAIRMAN KOTELCHUCK: Yes.

MS. GOGLIOTTI: And this one just slipped through the cracks at the last meeting. And the observation was that SC&A found that the X-10 and Y-12 Site Profile Review findings ---

CHAIRMAN KOTELCHUCK: I'm not able to get onto the Live Meeting. So I'm looking in the materials that you sent, Rose. Where do I --- I have to go back to Oak Ridge, 14 to 18 sets, Oak

Ridge?

**OAK RIDGE**

MS. GOGLIOTTI: Correct.

CHAIRMAN KOTELCHUCK: Okay. And the number again, that we're talking about now?

MS. GOGLIOTTI: Is 438, Observation 1.

CHAIRMAN KOTELCHUCK: Okay.

MS. GOGLIOTTI: Which is on Page 23.

CHAIRMAN KOTELCHUCK: Thank you. Okay.

MS. GOGLIOTTI: Okay. And with this observation, NIOSH came back and said that if Site Profile changes do result in a potential increase in dose, the claim would be reviewed under PER. And so we essentially agreed with that. Then we recommended that we could close out this observation.

CHAIRMAN KOTELCHUCK: Okay. That sounds good, 420, Page 20 ---

MS. GOGLIOTTI: 438.

CHAIRMAN KOTELCHUCK: Pardon?

MS. GOGLIOTTI: 438.

CHAIRMAN KOTELCHUCK: 438. I haven't quite gotten there yet.

MEMBER BEACH: It's on Page 23 ---

CHAIRMAN KOTELCHUCK: Yes. No, I'm getting there. There we go. Yes, right. So the recommendation is to close. And are there any --- this was an observation?

MS. GOGLIOTTI: Correct.

CHAIRMAN KOTELCHUCK: Are there any comments by any Board Members or anyone else?

MEMBER MUNN: No. Except this is Wanda. And my Live Meeting screen has ---

MS. GOGLIOTTI: Oh, I'm sorry. It must have cancelled out. Let me fix it.

MEMBER MUNN: Oh, okay. I was going to say, it was up and now it's gone.

MS. GOGLIOTTI: I wonder if I lost my ---

MEMBER MUNN: Thank you, ma'am.

CHAIRMAN KOTELCHUCK: Okay. So we're in agreement on that. And this observation should be closed now.

MS. GOGLIOTTI: Yes.

CHAIRMAN KOTELCHUCK: Good, okay. Let me just --- observation. Good. And then what was the other item that was --?

MS. GOGLIOTTI: The other one is 355.2. And that is on Page 24.

CHAIRMAN KOTELCHUCK: Okay. Oh, yes, here it is. Okay.

MS. GOGLIOTTI: And this finding was that NIOSH used an incorrect dose correction factor for the years 1980 through 1982 for missed photon doses.

CHAIRMAN KOTELCHUCK: Yes.

MS. GOGLIOTTI: And we did discuss this at the last meeting. And NIOSH was going to investigate it further.

CHAIRMAN KOTELCHUCK: Oh. And what did NIOSH -- where is that now?

MR. SIEBERT: Well, we are continuing to research the issue itself. There are some very specific DOELAP documents that we have to find to make that determination, which we just haven't

gotten. We haven't tracked down the specific documents we're looking at.

However, as I mentioned at the last meeting, to be claimant-favorable, since the TBD has somewhat conflicting information in it, we've changed our tools and our dose reconstruction guidance document to reflect taking the exposure TLD DCF all the way through 1986, which is what the second part of the TBD seems to indicate, since the larger DCFs are claimant-favorable, rather than switching over in 1980.

So we've made the change while we're researching the issue. And when it comes to this claim, I've actually looked at it. And even if we apply those DCFs to this claim, there's no change in compensability.

It goes from slightly under 30 percent to 30.45 percent. So there's no impact on [the compensability of] this claim. So I would guess we could probably close out this specific one. And we've already turned it over to the TBD owner to continue researching that issue and make a TBD

change if it's determined to be applicable.

CHAIRMAN KOTELCHUCK: Right. Even though I recognize that we could close it, that it will not affect compensability, and that's good to hear, my instinct is that we should have this down for the record and have the NIOSH response written down and not close it right now but keep it in abeyance.

MR. KATZ: Well, actually, Dave, and I think it's in progress, not in abeyance. Because until NIOSH resolves what should be there, you'll know what's correct. So I think it's actually not even in abeyance until -- right? Until Scott's person does his research.

CHAIRMAN KOTELCHUCK: Right. Can we question these folks for the Subcommittee members, do we want to keep it under in progress until everything is finally settled? Or should we close it now? Because it's clear already that this will not change compensability.

MR. KATZ: Dave, let me just say, I mean, I don't think you should close the case just

because of its impact on this case. Because you need to know whether the method is correct or not. And until we get an answer on that, you don't know whether the finding is correct or not.

MEMBER CLAWSON: Well, I'll agree with Ted, that we ought to keep it open.

CHAIRMAN KOTELCHUCK: Okay.

MEMBER CLAWSON: This is Brad. I'm sorry.

CHAIRMAN KOTELCHUCK: Okay, no. That's fine.

MEMBER CLAWSON: Rose? Also too, Rose, when you talk -- I'm sorry, maybe it's just me, but I'm having a hard time hearing you. If you could just maybe speak up a little bit.

MS. GOGLIOTTI: I'm sorry. I will try to speak a little louder.

MEMBER CLAWSON: That's a lot better, thanks.

CHAIRMAN KOTELCHUCK: Okay. Fine. So we will keep it open. And that finishes, then, what we want to do with this, for the moment.

Should we go on now to the SRS, to the Savannah River Site and 402.1? Are we ready to do that?

**SAVANNAH RIVER SITE**

MS. GOGLIOTTI: Sure.

CHAIRMAN KOTELCHUCK: Okay. Who will be reporting on that? Rose?

MS. GOGLIOTTI: That would be me.

CHAIRMAN KOTELCHUCK: Yes.

MS. GOGLIOTTI: 402.1, when we left this, or this is the case that we left off on ---

CHAIRMAN KOTELCHUCK: Right.

MS. GOGLIOTTI: -- and we did start discussing it. The finding was that no photon dose was assigned to the years 1952 through 1954.

CHAIRMAN KOTELCHUCK: Yes.

MS. GOGLIOTTI: And NIOSH came back here and responded.

CHAIRMAN KOTELCHUCK: There we are.

MS. GOGLIOTTI: And actually, this was the case that Grady had pointed out in his email to us earlier. Somehow in the process of assigning cases, SC&A was assigned the same case to review

twice in different sets. And so this is actually a repetitive finding.

CHAIRMAN KOTELCHUCK: And when was this, when was this done previously?

MS. GOGLIOTTI: I believe in the tenth set. Grady's not on the line, but we did actually have identical findings between the two cases, which is a good control, I guess.

CHAIRMAN KOTELCHUCK: Right.

MR. ALLEN: The original SC&A number was 330. It's the same case as SC&A 402.

CHAIRMAN KOTELCHUCK: A-ha. But I'm a little confused. So this is literally the same person --

MS. GOGLIOTTI: Correct.

CHAIRMAN KOTELCHUCK: -- listed twice. Their case comes up twice. But why would that be? Or how could that happen? How did that happen?

MS. GOGLIOTTI: The Subcommittee assigned the same case to SC&A twice. And through whatever the process, that was not caught.

MR. KATZ: Okay. So NIOSH included

this in the pool for the next set, I guess.

CHAIRMAN KOTELCHUCK: Right.

MR. KATZ: And we collected it, and that's how it happened.

MR. HINNEFELD: Yes. That's what happened. And it wasn't removed from the selection pool when the pool was gathered for this 402 it came from.

CHAIRMAN KOTELCHUCK: Okay.

MR. KATZ: Well, then bravo to SC&A for their consistency.

CHAIRMAN KOTELCHUCK: Right.

MR. KATZ: We can move on.

CHAIRMAN KOTELCHUCK: Right. We certainly can. So this has been closed before.

MR. SIEBERT: Correct. This is Scott. There's two questions. Number one is should we just withdraw all the findings, because they are identical to what we've already addressed in the 13th set.

CHAIRMAN KOTELCHUCK: Got it.

MR. SIEBERT: Entirely up to you.

MR. KATZ: I mean the whole case is withdrawn, because we're not re-reviewing a case we've reviewed.

CHAIRMAN KOTELCHUCK: Right.

MR. KATZ: Yes.

MR. SIEBERT: To go along with that, I did some more investigation. There is another case in the identical situation.

CHAIRMAN KOTELCHUCK: Okay. So the issue is that when we select something, NIOSH has to remove it from the pool --

MR. KATZ: Yes. You know, NIOSH comes up with a sort of nomination pool of potential cases. And these cases somehow slipped by you and ended up in the pool for the later set. So they shouldn't have been in there, but they somehow got in there. And then we actually selected them.

CHAIRMAN KOTELCHUCK: Right. So I guess I'm sensitive to the fact that the Subcommittee assigned them again. Well, we did assign them again. The Subcommittee members would have no way of knowing this.

MR. KATZ: Of course. No, it's no fault of the Subcommittee members. There's no way to keep that in your head.

CHAIRMAN KOTELCHUCK: Right. And I'm not criticizing NIOSH, just simply that I hear what has to be done. And in this case, it wasn't, by accident.

MR. KATZ: Yes. It's just an unfortunate mistake, it sounds like.

CHAIRMAN KOTELCHUCK: Yes, correct.

MR. KATZ: Yes. And then both these cases, we don't need to go through them again, for sure.

CHAIRMAN KOTELCHUCK: Absolutely. So this case is withdrawn, right?

MR. KATZ: Right. Just take it out of the pool.

CHAIRMAN KOTELCHUCK: Yes. Okay. Then this is withdrawn, and let's go on to the next ---

MR. HINNEFELD: This is Stu Hinnefeld. Just for my clarification, Scott, you said there

was another case in this situation?

MR. SIEBERT: Yes.

MR. HINNEFELD: Do you have the SC&A numbers for that case?

MR. SIEBERT: Correct. And it's in this set as well. It's SC&A-405.

MR. HINNEFELD: Okay. It was also what?

MR. SIEBERT: It was also in the 13th set as 329. And once again, kudos to the reviewer that the findings are the same.

MR. HINNEFELD: Right.

CHAIRMAN KOTELCHUCK: Okay. So that will be removed now before we get to it, or when we get to it we'll remove it, or whatever. We can remove it now. There's no issue.

So, Rose, our next one is ---

MS. GOGLIOTTI: Is also an SRS case. It's Tab 403. And that's Finding Number 1.

CHAIRMAN KOTELCHUCK: What I have --- oh, right. Wait a minute. I had 402.2, but that's now withdrawn. I see, right. So we have to go ---

pardon me. I'm just scanning. Yes, 403.1, thank you.

MS. GOGLIOTTI: Okay. And this finding states that incorrect facility and energy distribution was used to calculate photon doses. And NIOSH came back and agreed that, in fact, the incorrect distribution was used and the workbook error, copy and paste error, that it did not change the PoC significantly in this case, not enough to flip the case above compensability.

CHAIRMAN KOTELCHUCK: Yes.

MS. GOGLIOTTI: Which is essentially a Q&A error. And NIOSH and SC&A are in agreement.

CHAIRMAN KOTELCHUCK: Right.

MS. GOGLIOTTI: So we do recommend closing this case.

CHAIRMAN KOTELCHUCK: Right. Actually, although the number was very close to 50 percent it actually lowered it [PoC], did it not?

MS. GOGLIOTTI: Correct.

CHAIRMAN KOTELCHUCK: At the PoC. Okay. Well, folks from the, should we close this?

Are there any comments from the Subcommittee members?

MEMBER MUNN: Close it.

CHAIRMAN KOTELCHUCK: Okay. Others?

MEMBER BEACH: I agree, close it.

CHAIRMAN KOTELCHUCK: Okay.

MR. KATZ: And just to note for the record, John Poston just sent an email saying he's on now. So, John, welcome.

MEMBER POSTON: Thank you.

CHAIRMAN KOTELCHUCK: Yes, very glad to have you, as always.

MEMBER CLAWSON: You know what, go ahead and close it.

CHAIRMAN KOTELCHUCK: Okay. I agree. This will be closed now.

MS. GOGLIOTTI: Okay.

CHAIRMAN KOTELCHUCK: Okay. Next?

MS. GOGLIOTTI: Next finding is 403.2.

CHAIRMAN KOTELCHUCK: Yes.

MS. GOGLIOTTI: And this finding states that incorrect dose correction factor was

applied to shallow dose for the lip. And NIOSH responded that they did, in fact, apply the wrong correction factor. They applied a 1.5 correction factor instead of a 1.2.

CHAIRMAN KOTELCHUCK: Yes.

MS. GOGLIOTTI: It's claimant-favorable, but it is an error nonetheless. And since we are agreement, again, we do recommend closing this issue.

CHAIRMAN KOTELCHUCK: Right. Seems straightforward. Looks like we can close it. Maybe I'll ask, are there any objections to closing or further questions?

MEMBER MUNN: No.

CHAIRMAN KOTELCHUCK: Okay. Fine, that's good. We can close that. Alright.

MS. GOGLIOTTI: The next finding is 403.3.

CHAIRMAN KOTELCHUCK: Yes.

MS. GOGLIOTTI: And that finding states that: missed an environmental dose, was not carried through the year of cancer diagnosis.

CHAIRMAN KOTELCHUCK: Questions?

MS. GOGLIOTTI: And here, NIOSH responded and said that the annual dose was not carried through because the dose was less than one millirem. And that's not included for a requirement --

CHAIRMAN KOTELCHUCK: Right.

MS. GOGLIOTTI: -- in IREP. And while we do agree that one millirem doses are not required to be included, we did make this a finding, because we found it quite unusual that all of the yearly environmental doses were less than a millirem. And they were still assigned. But this does not have a significant impact on the case as it is less than one millirem.

CHAIRMAN KOTELCHUCK: But I'm not sure why -- the fact that doses less than a millirem were included in later years ---

MS. GOGLIOTTI: In earlier years.

CHAIRMAN KOTELCHUCK: Pardon?

MS. GOGLIOTTI: In earlier years. So they assigned dose all the way to the year of

diagnosis but did not include the year of diagnosis.

CHAIRMAN KOTELCHUCK: Right. The question in my mind is why is this a finding as opposed to an observation?

MS. GOGLIOTTI: Well, at the time we were making findings for when there was an error. And we do make findings even when we know that it won't impact the outcome of the case.

CHAIRMAN KOTELCHUCK: Well, but it wasn't an error. I mean, we've traditionally -- or was this a policy that changed? Ever since I've been here, whenever we've had a dose less than a millirem, we ignore it. Because it will have no impact, that small a dose.

MR. SIEBERT: Well, this is Scott. I can probably explain this a little clearer.

CHAIRMAN KOTELCHUCK: Okay.

MR. SIEBERT: Normally, what we will do is we will keep all doses in a claim even if they're less than one millirem unless we're running [out] of IREP room. It only takes 1,000 lines. And if

we're going over that, we may start removing less than one millirem. Generally we keep all the doses.

In this case, we've already spoken about this. It was in the best estimate territory very close to 50 percent. So when we were doing the best estimate, we ran the environmental doses through the CAD tools, which only give annual doses.

So in the final year of diagnosis, it's really only a partial year of dose that is received rather than the full year. The tool just gives you the full year.

What the dose reconstructor did was look at that last year and remove it, because it was less than a millirem, rather than having it be a slight overestimate. And I'm talking very slight overestimate.

For instance, we're in the 45 to 52 percent range, we take those into account. So that's the thought process that was used by the dose reconstructor as to why that single year was

removed. But all the other years that are less than one millirem were not pulled out.

CHAIRMAN KOTELCHUCK: I'm still up in the air about findings and observations. I see the reasoning. What do other Subcommittee members think? What's your --- maybe because I was involved so much in writing the report to the Secretary, I started to take much more careful notice of whether we do a finding or an observation. Do other folks ---?

MEMBER MUNN: This is Wanda. And I think we've muddied the water with this as time goes on. Whether it's an improvement or not, I don't know. But we had a fairly reasonable, I thought, criterion originally for what constituted an observation and what should be a finding.

Essentially, I think our original understanding was that an observation was simply a comment from the observers calling the attention of the reader to some facet which did not, in fact, change --- it was not likely to change the outcome --

CHAIRMAN KOTELCHUCK: PoC, yes.

MEMBER MUNN: -- in any way, and therefore did not need further pursuit or observation, I mean, or actual action from anyone.

But I think we have, somewhere along the way, I don't know, three or four years ago -- no, it's actually a little longer than that, I suppose -- there was a great discussion about certain observations perhaps needing to be pursued in some way. And that's when we started muddying the water, as I recollect it.

So now we have a situation where it appears that if anyone feels that some aspect of the comment needs to be followed-up, we change it to a finding. At least that's my ---

CHAIRMAN KOTELCHUCK: Yes.

MEMBER MUNN: -- the way it appears to me. But the original purpose of an observation is just to call the reader's attention to the fact that something slightly off key was noted by the reviewer and was called to our attention.

CHAIRMAN KOTELCHUCK: Yes, yes. So

this would, in some very, very slight way, affect the PoC. I suppose that would be the argument for the observation.

MR. SIEBERT: Well, I would point out that it was not done incorrectly. Because it is a dose less than one millirem which --

CHAIRMAN KOTELCHUCK: Yes.

MR. SIEBERT: -- is a normal way that we can remove it. It just seemed unusual to the reviewer that it was done differently, which I understand, but I just explained.

CHAIRMAN KOTELCHUCK: Yes, yes.

MEMBER MUNN: From my perspective, it was an observation. But I guess it's in the eye of the beholder.

CHAIRMAN KOTELCHUCK: Well, it is. It still seems to me an observation. Because it was not incorrect.

MR. KATZ: Dave --

(Simultaneous speaking)

MR. KATZ: I think SC&A was reasonable at the time they reviewed it in thinking this was

a finding. And I think it's also fine for the Subcommittee to convert this to an observation.

CHAIRMAN KOTELCHUCK: Yes. I mean, we're ---

MR. STIVER: If I can just jump in for one thing ---?

(Simultaneous speaking)

MR. STIVER: Yes. I think there was really a question regarding process, regardless of it was one millirem, or two, or three, or four. And it was really why, in this final year, was a dose not included when it was in the previous years.

And, you know, Scott's explanation is perfectly fine in that there's that. But, yes, I think it could be an observation that, you know, from a process standpoint, I think, if it kind of raised to the level of a finding. And again, it's kind of subjective, in a sense.

CHAIRMAN KOTELCHUCK: Yes, yes. We so often use, in current practice, we so often use the fact that something's less than a millirem. Therefore it can be ignored and is ignored.

Sometimes, obviously, it is carried. But speaking to that, I would go for an observation. And I feel -- Wanda, what do other Board Members think?

It's a call. But the question is, we are starting a new set, or we're almost, we're at the beginning of a new set, and a new Secretary's Report.

And so it's a reasonable time to make changes in procedure, it seems to me. Because we tried to be consistent with six through 13. But we're really -- we're in a new, I wouldn't say a new era, but a new report, certainly, the beginning of a new report.

Well, let's put it this way. There are two votes for changing it to an observation. Do I hear anyone saying let's keep it as a finding?

MEMBER CLAWSON: Well, no. As Wanda said, through the years we've muddied everything else. By the way, this is Brad.

CHAIRMAN KOTELCHUCK: Yes.

MEMBER CLAWSON: The thing is, it's also what we heard from SC&A is that per their

requirements, they're classifying it as a finding. I guess I understand, and I don't see much added but, you know, I guess I want to ask John, you know, under your criteria you mentioned that this is still a finding.

CHAIRMAN KOTELCHUCK: Yes.

MEMBER CLAWSON: And so, you know, I agree that I don't see it as a big issue because of the one millirem or whatever. But even throwing that out, coming back to what the criteria that we've given our contractor, wouldn't spell finding.

MR. KATZ: Well, Brad, as I said, I think it was reasonable for SC&A to think this is a finding on the front end. I think the discussion clarified that it really isn't. It's an observation. If it's a finding, it's incorrect. Because --

MEMBER CLAWSON: Right.

MR. KATZ: -- there's no problem in the procedure. So I just think it makes sense for the Subcommittee to treat this as an observation.

MEMBER CLAWSON: Well, there's no problem with us doing that, right? We can change a finding into an observation.

MR. KATZ: Yes. You've done that before, right?

MEMBER CLAWSON: Right.

MR. STIVER: This is John. I'd be willing to just have us change it into an observation. Maybe on the front end it did appear to be a finding. But, you know, on closer scrutiny it's not.

MEMBER CLAWSON: Okay. Well, I don't have a problem. We can vote me in for the observation.

CHAIRMAN KOTELCHUCK: Right. Although, really this is a small matter,but we'll try to be consistent as we move ahead. So unless I hear otherwise, let's change it to an observation. A last call for comments on this. [PAUSE]

Then it becomes an observation.

MS. GOGLIOTTI: Okay. We will update

that in our records.

CHAIRMAN KOTELCHUCK: Right. Okay.

MS. GOGLIOTTI: The next finding is Tab 403, Finding Number 4.

CHAIRMAN KOTELCHUCK: Yes.

MEMBER CLAWSON: This is Brad. Rose, where are we looking at on this. I've got this on a computer disk. And I'm having a hard time finding 403. But what's it under?

MS. GOGLIOTTI: If you are looking in the files that I sent out, it should be in the Issues Resolution folder. And then

MEMBER CLAWSON: What?

MS. GOGLIOTTI: And then there is a BRS printout folder.

MEMBER CLAWSON: Okay. That's what I needed to know. Thank you.

CHAIRMAN KOTELCHUCK: Right. And, Rose, this is the first time we're using this rather than the old matrix. We've changed over from the old matrix system --

MS. GOGLIOTTI: Correct.

CHAIRMAN KOTELCHUCK: -- to go directly to BRS. And you'll forgive any one of us on the Subcommittee. It takes a little while to get used to the new system and checking things over. So it may take us a few moments more until we get used where's the key place to look to see what's going on.

On the other hand, you did send it to us at least about a week ago, which was very nice and did give us an opportunity to look at it in its most basic form rather than you taking it out and putting it in a matrix.

That is to say putting it in the BRS form is an advance, but for those of us who are not used to it, it slows us down a little in responding to the discussion. And I just note that, if you will, for the record.

MEMBER CLAWSON: And thank you. I was just having a hard time. I was trying to look at it in the matrix part of this. And I wasn't finding it.

CHAIRMAN KOTELCHUCK: Right.

MEMBER CLAWSON: I've got a disk. I don't have Live Meeting, but there's more on that. Okay, I appreciate that. Thank you.

CHAIRMAN KOTELCHUCK: Yes, yes. And, Brad, I did the same thing when I got it and started looking it over. And then I realized what was happening. And it's a step forward, truly.

Okay. Rose, if you will, go ahead with 403.4.

MS. GOGLIOTTI: And if you guys, if anyone needs me to resend out instructions on how to use the BRS, I can certainly do that.

CHAIRMAN KOTELCHUCK: Could you? I would appreciate it.

MS. GOGLIOTTI: We have a really straightforward tutorial on how to use it. So ---

CHAIRMAN KOTELCHUCK: Yes, yes.

MS. GOGLIOTTI: -- if that will help you.

CHAIRMAN KOTELCHUCK: I was going to ask you to do that. And would other Subcommittee members like to get it?

MEMBER CLAWSON: This is Brad. I would. I'm just trying to figure this out a little bit. Usually I'll have Live Meeting. And that's not a problem. But ---

CHAIRMAN KOTELCHUCK: Right.

MEMBER CLAWSON: -- a lot of the times I won't be able to.

CHAIRMAN KOTELCHUCK: Right. Same with me. Rose, why don't you send it out to all of our Subcommittee members.

MEMBER BEACH: Rose, this is Josie. I'm good. I don't need it.

CHAIRMAN KOTELCHUCK: Oh, okay. Good, good. Alright.

MS. GOGLIOTTI: Alright. Not a problem, easy enough.

CHAIRMAN KOTELCHUCK: Thanks a lot.

MS. GOGLIOTTI: And it is a little bit more challenging to follow in the BRS printout than it is directly accessing the BRS, but when you don't have access to the BRS that's been existing.

CHAIRMAN KOTELCHUCK: Yes.

MS. GOGLIOTTI: Okay. Well, we can move on then. The next finding is 403.4.

CHAIRMAN KOTELCHUCK: Which may be 403.3. By the way, just to understand bookkeeping, since we just did 403.3, which is now an observation, do you change this? Or given that it's the designation, you still leave it at 403.4.

MS. GOGLIOTTI: I will leave it at 403.4. Otherwise, it becomes impossible to track findings.

CHAIRMAN KOTELCHUCK: Very good, okay. I just was curious about the bookkeeping, record keeping. Okay.

MS. GOGLIOTTI: And we had already agreed that we won't be modifying the dose reconstruction cases to reflect this. It's just simply documented in the transcript and in the BRS --

CHAIRMAN KOTELCHUCK: Okay.

MS. GOGLIOTTI: -- for an observation.

CHAIRMAN KOTELCHUCK: Alright.

MS. GOGLIOTTI: The next finding is

403.4, failure to assign unmonitored tritium dose to the year 1994. And NIOSH responded and said that unmonitored tritium dose was not assigned for 1994, because internal monitoring was performed that year.

And the process of SRS did not assign tritium. And there was no monitoring. Sampling was inexpensive and easy at the site for workers to conduct. So they don't believe that the EE was exposed to tritium without tritium monitoring.

And we do disagree with the dose reconstructor's judgement in this particular instance. But the difference between the two methods only results in a difference of approximately a millirem for each cancer site. And that's far too insignificant to impact the PoC. So we do recommend closing this issue.

CHAIRMAN KOTELCHUCK: Okay. Fine. And did it happen to be a compensated? It was not a compensated case, was it?

MS. GOGLIOTTI: Correct. This is the case where the PoC was ---

CHAIRMAN KOTELCHUCK: Oh, that's right. We saw it before.

MS. GOGLIOTTI: Yes.

CHAIRMAN KOTELCHUCK: Right. It, actually, for all the PoC was lowered, I believe.

MS. GOGLIOTTI: Correct.

CHAIRMAN KOTELCHUCK: Yes, okay. Anyhow, and that certainly is a finding. Because there's disagreement with the judgment in this case. But it does not affect the outcome, and therefore closure is recommended. And that, to me, makes sense. And then this would remain a finding.

MR. KATZ: Except the Subcommittee needs to decide what it feels about the finding.

CHAIRMAN KOTELCHUCK: Right. And there is a disagreement of procedure. But we don't have to resolve that. Because it would not impact the decision.

What do other Subcommittee members think? Is this something we should set up and establish a --- is there some reason to establish,

to try to decide on this issue? That is, is there something in the procedure that we want to establish for this case and future cases?

MR. SIEBERT: Well, this is Scott. I just want to clarify. I don't necessarily see this as a professional judgment issue. This is the standard way we deal with tritium at the Savannah River Site. So if the person was not monitored for tritium ---

MS. GOGLIOTTI: I believe they were monitored for tritium. It was just the single year that they were not monitored.

MR. SIEBERT: Exactly. There was a year they were not being monitored. And Savannah River, I mean, especially in the '90s, tritium was easy and inexpensive to monitor for. So if there was no monitoring, the thought process is there was no reason to monitor, there was no exposure potential. And we assign ambient doses as opposed to an additional tritium dose.

CHAIRMAN KOTELCHUCK: Yes.

MS. GOGLIOTTI: Was the ambient dose

assigned in this case for that?

MR. SIEBERT: I can't tell you off the top of my head. But I'd say that's the normal way we would deal with it.

CHAIRMAN KOTELCHUCK: Yes.

MS. GOGLIOTTI: And I guess the SC&A argument would be that the EE has the same job, the same job title, the same work locations. And so we believe that it could just as easily been lost in the records and over the difference of one millirem.

MR. SIEBERT: Well, it's a bigger question to me. Because it's not just a question of, you know, we're not believing we're losing records at Savannah River. It's a question of do we believe that they were monitored or were they not monitored?

And our standard process has been that if they're not monitored for tritium, there's a reason for it. Because Savannah River monitored for tritium when needed.

MEMBER MUNN: And the key phrase there

is when needed.

CHAIRMAN KOTELCHUCK: Right.

MEMBER MUNN: The only question is whether there is some post facto judgment that needs to made about whether or not they should have monitored that year. And I don't see the ---

CHAIRMAN KOTELCHUCK: I mean, I would think that the, I mean, it seems quite credible to me that a person could be assigned different tasks for a year and therefore got reassigned somewhere for any one of a number of reasons.

MEMBER CLAWSON: This is Brad. This is Brad.

CHAIRMAN KOTELCHUCK: Okay.

MEMBER CLAWSON: Being on the Savannah River work site, this is one of our questions that comes up is the monitoring of the people, and were the right people monitored, and continued. And we have seen through the process that sometimes they do, sometimes they don't.

So in claimant-favorability -- and their jobs haven't changed, so this has been part

of our problem. And this is an issue in the Work Group that we're trying to ---

CHAIRMAN KOTELCHUCK: Brad, I'm having trouble hearing you. Am I the only one?

MEMBER CLAWSON: Well, can you hear me any better now?

CHAIRMAN KOTELCHUCK: A little bit, not much. Are other people having trouble?

MEMBER MUNN: No.

CHAIRMAN KOTELCHUCK: Okay. I'll take care of it. It may be on my end on the phone. Go ahead, Brad. I hear you. It's faint, but I hear you.

MEMBER CLAWSON: No problem, I'm sorry. The thing is is we're still trying to figure out, because we see people that have been monitored for tritium. They are in the process of it. And then we don't have data. And then they're back.

And our opinion is is that basically there's -- we're trying to figure out that loop right there. So this is a prime example of that,

where there's no data for them. And, you know, we're trying -- they're trying to deal with this issue themselves. And I don't think that we can just walk past it.

CHAIRMAN KOTELCHUCK: A-ha. Brad, I don't remember, are you on that Subcommittee or Working Group?

MEMBER CLAWSON: Yes. I'm chairing it.

CHAIRMAN KOTELCHUCK: Okay. Well, fine. We have so many working groups. I really don't remember who's on which group. So this really an issue that not only we can't resolve, but the Working Group is working on it.

MEMBER CLAWSON: I just spent almost six or seven hours last week going through tritium samples, and people, and looking at the breaks in a lot of this, and not really understanding.

And this is one of my questions that I had was how come --- and they're in the same position or whatever --- on one side, you know, I understand what Scott is saying. You know, they

could have been transferred or whatever. But it doesn't make sense to me that they're not.

And so then to just give them ambient dose, is that correct? I think that they've done a good job from that standpoint, but it's just interesting to me that we don't continue to --- something's wrong there. That's just the bottom line. And we need to get to the bottom of it and figure it out. Because there is gaps in a lot of this sampling, there's gaps.

MR. HINNEFELD: This is Stu Hinnefeld. I would suggest maybe the path forward here that this be sort of transferred to the Savannah River Work Group, since this is a question that is being addressed there.

I mean, the current guidance that we use in dose reconstruction is that Savannah River monitored people generously for tritium. And if there's a year that's missed, that's because that person was probably reassigned that year and not in a tritium area.

And that is a question then that Work

Group for Savannah River is considering during their debate. And I don't think the DR Subcommittee is going to resolve it. That'll be up to the Work Group.

MEMBER CLAWSON: Well, and I agree with Stu. Because this is one that we've been dealing with at almost all these different sites when it comes to different monitoring. But the tritium is the interesting one, especially at Savannah River.

I would still find it as a finding, my personal feeling. And we're not going to be able to do it here. We've been trying to be able to do this for years at the Subcommittee group. And I think we ought to just put it to us.

MR. KATZ: So I would suggest then, Dave ---

CHAIRMAN KOTELCHUCK: Yes?

MR. KATZ: -- that here we just leave it in progress. Because if the Work Group is wrestling or will be wrestling with this, then it is potentially a consequential matter. And we don't want to close it until you know what the

outcome of that discussion is.

CHAIRMAN KOTELCHUCK: Well, but I have to say, whichever way the Working Group decides, this result will not change compensability.

MR. KATZ: That's true. But we're not just looking at what the impact is on this case. We're also concerned about the impact of a procedural error, if it were an error, on cases that were like it that we didn't review.

CHAIRMAN KOTELCHUCK: Oh, absolutely. And we, from this discussion, we are left with the understanding that the, if you will, some aspect of the scientific validity has not been decided.

MR. KATZ: Right. And so all I'm saying is instead of closing it, if you leave it in progress, then once it gets closed at the Work Group we can get that result and close this correctly as either affirming the finding or, you know, negating it. But you can't really do that at this point, because ---

CHAIRMAN KOTELCHUCK: Right.

MR. KATZ: -- that Work Group will be

making that decision.

CHAIRMAN KOTELCHUCK: Right. Yes, I agree with you on that. And so there's nothing lost in a review like this in leaving it open --

MR. SIEBERT: Right.

CHAIRMAN KOTELCHUCK: -- and then closing it later once a decision has been made.

And for the individual, this individual case, it will be closed when the scientific judgments that are important to us are resolved, and important to the case. So I'm, okay, I'm persuaded that we leave it open.

MR. SIEBERT: This is Scott. I mean, this is entirely your thing. I'm just asking. Is there no longer the option of transferring it to the Working Group?

MR. KATZ: Well, we don't really transfer cases to Working Groups, Scott. We just ---

MR. SIEBERT: Okay. That's fine. \That's all I need to know.

MR. KATZ: Yes, that's all.

CHAIRMAN KOTELCHUCK: Yes.

MR. KATZ: But the issue we're going to send to them, and I will send that Work Group an email just to make sure that when they do meet they have this on their agenda to try to close this matter out.

CHAIRMAN KOTELCHUCK: Yes.

MR. KATZ: Not particular to the case, but particular to the issue.

CHAIRMAN KOTELCHUCK: Right. And it's clear that the Working Group is working actively to try to resolve it. And I don't envy their -- I don't envy the task before them. So we will leave it open.

MR. SIEBERT: Yes. Just one last point.

CHAIRMAN KOTELCHUCK: Sure.

MR. SIEBERT: I just wanted to keep it in. I did go back and check, and the environmental was applied in 1994, as I stated.

CHAIRMAN KOTELCHUCK: Okay. So that answers Rose's question. Alright. Then I think

we're ready to go on. Rose, the next?

MS. GOGLIOTTI: Okay. The next is an observation from Tab 404, Observation 1. And this was an interesting case for us. In the CATI report, the EE mentions receiving the chelation. And there is some documentation of this. But we believe that there wasn't enough documentation of this.

In 1998, or 1988, excuse me, the SRS Medical Department would have handled this. And we're curious if all of the records that were generated at that time were actually received by NIOSH. Because there are not enough records in the EE's files.

CHAIRMAN KOTELCHUCK: Response?

MS. GOGLIOTTI: NIOSH did respond, saying that they followed their procedures, essentially, and that any additional information would not change the dose that was assigned.

And we believe it's kind of impossible to know what information would be in the DOE files or in the chelation files without having them. So

we don't necessarily know what those records would contain. And so we just question if the additional records were requested from SRS Medical.

MR. SIEBERT: Once again, from our point of view, we knew the date of the incident, and there's not going to be additional information from the chelation that is going to impact how we assessed the claim. So there would be no further requirement of records.

CHAIRMAN KOTELCHUCK: Do you believe that you have the exposure records that would have resulted in the chelation, I mean, that there may have been an incident or a series of incidents? Do you have the exposure information on the incident or incidents?

MS. GOGLIOTTI: We have some information on the chelation that was performed after the incident.

CHAIRMAN KOTELCHUCK: Yes.

MR. SIEBERT: And we assigned it as an incident.

CHAIRMAN KOTELCHUCK: Okay.

MR. SIEBERT: So there would be no further information that would change how we would assess it.

CHAIRMAN KOTELCHUCK: Right. I see. Because the medical verification, right. If you have the exposure data for the incident, then you have it. The chelation is not going to tell you anything about the exposure, I suppose. No.

MS. GOGLIOTTI: Well, it tells you about how the radionuclides were discharged from the body after the incident.

CHAIRMAN KOTELCHUCK: Because the medical people would monitor that.

MS. GOGLIOTTI: Correct.

CHAIRMAN KOTELCHUCK: That's true.

MEMBER CLAWSON: Well, so, Rose, this is Brad. Help me and, Scott, you too, help me understand this. So we have the record of the incident that happened. And going into the medical part of this, they would have the organ-specific, how it lays out. Is that what the issue is, is you don't have that medical part of

it?

MS. GOGLIOTTI: We don't have the level of records that should have been generated. I think actually Doug may have worked at SRS at this time.

MEMBER CLAWSON: And, Scott, you're looking at it that you've got the dose that they were given from the incident. And so we don't need these records, correct?

MR. SIEBERT: That's correct. And from a chelation point of view, that's going to impact how much material is coming out when you're doing a chelation.

And what we do for chelation is we look at the data after chelation effect has been impacted. We don't use the data for the first 100 days. So the impact of chelation has already been removed from the body by the time we're looking at the data that we're using.

So the amount that's removed from the chelation is already taken into account by us using the later data. I mean, if Liz Brackett wants to

elaborate on that, I'd be happy to -- because she knows -- I know quite a bit about it, but by all means, Liz knows more.

MS. GOGLIOTTI: I think the question is not that we're concerned in this particular instance, but we're just concerned that the SRS medical records, whether or not they're actually being received in instances where there is a chelation.

MS. BRACKETT: Well, I would like to jump in here. This is Liz Brackett.

CHAIRMAN KOTELCHUCK: Please do.

MS. BRACKETT: There is nothing that I'm aware of that would be in a medical record for chelation that would impact how we did our dose assessment, other than the specific dates of chelation. Medical does not collect any information that's of use to us in an internal dose assessment.

CHAIRMAN KOTELCHUCK: There are no, I mean, what about the urinalyses up to --- before the chelation is started?

MS. BRACKETT: That wouldn't be the medical department. I mean, that would be something that would be in the individual's records --

CHAIRMAN KOTELCHUCK: Yes.

MS. BRACKETT: -- the analyses. That would not be the medical department.

CHAIRMAN KOTELCHUCK: How long, I mean --- yes, go ahead.

MEMBER CLAWSON: My question then is if, and I understand what you're saying, Liz, the medical information is not, the dose estimates are not in the medical records. They would be over in the -- the people that are taking care of that, your bioassay and urinalysis personnel, correct?

MS. BRACKETT: Right. Medical administers the chelation. They make the decision on whether to chelate or not. And they administer the chelates. But they don't do any follow-up as far as assessing dose, or tracking where the material is, or anything. That is all health physics. That would be that aspect of it.

CHAIRMAN KOTELCHUCK: A-ha.

MEMBER CLAWSON: Okay. Now with this person, do we do we see that information in their file from the health physics part of it or ---

MS. BRACKETT: I have to field this back to Scott. Because I'm not familiar with this specific case.

MS. GOGLIOTTI: I believe there are just bioassays after the fact.

MS. BRACKETT: And so that's what would be used to do an assessment.

MEMBER CLAWSON: Would we have a bioassay before the fact so that we know what we were, not what we ended up with but what they came in with.

MS. BRACKETT: Well, that is not, that's not used. That's not relevant to doing a chelation assessment. We specifically don't use that, because it's not going to be representative of their final dose.

Because after the chelation, material would be removed. It would not contribute to the

dose. So it's not necessary to have --- and in fact, because you want to chelate quickly, you have a sample, because you have to wait for the urine to accumulate and then collect the sample. And normally you would want to chelate before you had time to do that.

CHAIRMAN KOTELCHUCK: Yes.

MS. BRACKETT: So those samples aren't used to assess a chelation, the intake.

CHAIRMAN KOTELCHUCK: A-ha. But the record is substantial or full to the extent that you believe is needed before the chelation was performed?

This person had the bioassays and urinalyses up through the time of chelation during their regular work period, during and after, maybe, but not after the incident? Is that what you're saying?

MS. BRACKETT: I'm saying that was common. As I said, I'm not familiar with the details of this specific case. But you usually do not have a sample that's collected between the time

of intake and the chelation, because you want to do the chelation as quickly as possible.

CHAIRMAN KOTELCHUCK: Right, right.

MEMBER CLAWSON: Well, and I understand that. I guess it's, I guess usually, and please forgive me, but whenever we have, we usually have a sample that was taken so that they always had a before and after to make sure that our chelation has been --

CHAIRMAN KOTELCHUCK: Effective.

MEMBER CLAWSON: -- effective.

CHAIRMAN KOTELCHUCK: Yes.

MS. BRACKETT: Well, and that's something that the site might be interested in. But from a dose assessment standpoint that is not necessary. We would do nothing from the standpoint of this program in assigning a dose.

You don't need that sample, because we don't -- the dose that was saved, so to speak, is not relevant to what the final dose was. Our interest here is what the dose was that was delivered to the organ of interest.

And so a sample collected right away --- and again, that would mean postponing chelation. You know, if you collected a sample two hours, for example, after an intake, well, there's a few things that would be diluted unless you had them void their bladder as soon as they had the intake. There would be uncontaminated urine in the bladder at the time of the incident.

And so then it would be diluted. And then only so much is going to come out within two or three hours. And again, that's when we'd want to be doing the chelation.

So, you know, a sample collected two or three hours after an intake only causes so much anyway. That's not usually used for assessing an intake. Because there's so much variability, so much uncertainty as to how much actually made it to the urine in that small time.

CHAIRMAN KOTELCHUCK: Yes.

MS. BRACKETT: But the bottom line ---

MEMBER CLAWSON: Yes. And I understand what you're saying. I'm just looking

at how we went through the process. Because there's almost --- they don't take chelation very --- they take it very serious. I'm just going from my standpoint.

They evaluate everything. Is this going to be beneficial, kind of like a last-ditch effort to us to be able to get rid of this stuff. And that's why I was just wondering.

What I've seen, it's been they make their determination on what's in their body. And are we going to chelate or are we not? Because my understanding is chelation is not a wonderful thing to do.

CHAIRMAN KOTELCHUCK: Right.

MEMBER CLAWSON: So we were under the thing --- I'm just trying to figure out, and I understand what the SC&A's issue is. Medical would have kind of been assisting with this, but basically it comes back to the bioassay and these people.

CHAIRMAN KOTELCHUCK: Yes. By the way, Brad, I do think that, from things that I've

talked with medical people, there's a fair amount of variability within the medical profession itself as to when you want to do chelation because of its long-term negative effects.

And some folks will hold out quite a while before they'll do chelation, you know, and do it only in, you know, crises. But others will do chelation a lot earlier, because they don't take the long-term effects, they don't consider the long-term effects terribly serious.

MS. BRACKETT: Well, there is, you know, disagreement over effects. In fact, I've seen papers recently that say that chelation is not bad, that it has a bad reputation, but there aren't these serious side effects that people often --

CHAIRMAN KOTELCHUCK: Yes.

MS. BRACKETT: I'm not familiar with all of that. I haven't been involved, involved with chelation. Like, I'm not sure, but I have seen that.

But you're right. The different sites certainly have --- there's a large variability

among them as to at what level they will chelate. And I believe Savannah River is one where they were more likely to chelate than not. It's something ---

CHAIRMAN KOTELCHUCK: Yes.

MS. BRACKETT: -- that they would do much quicker than ---

CHAIRMAN KOTELCHUCK: Right.

MS. BRACKETT: -- than some other sites. Whereas Brad said that, you know, there would be a lot more thought put into it and a lot more investigation before chelation. But Savannah River, you know, was more likely to chelate, I believe, than ---

CHAIRMAN KOTELCHUCK: Right, right.

MS. GOGLIOTTI: This the first chelation case we've ever seen at SRS. And that's why we brought this up.

CHAIRMAN KOTELCHUCK: Pardon?

MS. GOGLIOTTI: This is the first chelation case we've seen. But we assumed that, since they are so uncommon, SRS Medical likely

would have done a full dose reconstruction following the incident.

MS. BRACKETT: No. That's not --- I think you should talk to Doug about that. Because I would be very, very surprised if Medical had anything to do with any kind of dose assessment. That would be very unusual.

MEMBER CLAWSON: Medical would just, this is Brad again, medical would just administer that chelation, correct? That's kind of what I've seen. They ---

CHAIRMAN KOTELCHUCK: Right.

MEMBER CLAWSON: -- tell them what to do. And they're the ones that kind of do it. But it falls back to the other people to monitor for it.

MS. BRACKETT: Yes.

MR. FARVER: This is Doug Farver.

CHAIRMAN KOTELCHUCK: Yes, Doug. Hi.

MR. FARVER: Hi. I believe the basis for this observation is that, when we were reviewing this case, we read the CATI report. And

the employee mentions receiving a chelation, you know, for an incident. So we go and we look at the DOE files, and we do not find any information about that.

So in my experience, when there's a chelation performed, there's usually information generated about what the incident was, where it happened, when it occurred, and so forth, because of issues like Brad pointed out. They're very concerned. So we just didn't find any of that information when we looked in the DOE files. So that prompted us to say, you know, gee, are there more records out there? Because, you know, this must have been a fairly important field to do a chelation. So that was it.

CHAIRMAN KOTELCHUCK: Yes.

MR. FARVER: We thought there should be more information than was contained in the DOE files.

CHAIRMAN KOTELCHUCK: And, Scott, in your response, it's not clear whether you sought to find out if there was more information in the

medical, from the Medical Department or not.

MR. SIEBERT: No.

CHAIRMAN KOTELCHUCK: Because it was not necessary.

MR. SIEBERT: Correct. We did not, because there was no reason. We did not need any additional information to assess it.

CHAIRMAN KOTELCHUCK: Yes. And I understand from Ms. Brackett that what's happening is that, once the chelation begins, whatever urinalyses are done afterward, they will go to the lab, right? And the lab will have records of it, whatever the Medical Department did. Once they chelate, the assessment of what's coming out in the urine is going to be looked at by the biolab in the facility, right? Ms. Brackett, is that what you're saying?

MS. BRACKETT: I'm sorry. I was typing something to someone, and I didn't hear all of that.

CHAIRMAN KOTELCHUCK: I said that when you're -- you're saying that whatever information

there is, once chelation has begun, I see the argument why you want to start chelation as quickly as you can. And you're not going to spend time doing a sample, getting a urine sample before.

But once the chelation has begun, the urine sample is sent -- the urine sample for what is coming out from the chelation in the urine, is going to go to a lab onsite. And there will be records there.

MS. BRACKETT: Yes. Well ---

CHAIRMAN KOTELCHUCK: And yet that's not a record of the exposure, that's a record of what's coming out.

MS. BRACKETT: Correct.

CHAIRMAN KOTELCHUCK: Right. Based on the chelation plus the exposure.

MS. BRACKETT: Right. And that's what would be used to do the assessments.

CHAIRMAN KOTELCHUCK: Right, right. Well, I'm reasonably convinced that there's not useful information about exposure from that. And I think it's an appropriate observation. And this

discussion is a good one and one that's useful to bring to the Subcommittee. But I don't see that we're lacking exposure information that we could otherwise have.

MEMBER CLAWSON: Well, Dave, let's ---

CHAIRMAN KOTELCHUCK: Yes.

MEMBER CLAWSON: -- ask the other question here then.

CHAIRMAN KOTELCHUCK: Okay.

MEMBER CLAWSON: What did we find, not in the medical records, but did we find evidence of this in their file? Did we find anything like this? I guess there's --

CHAIRMAN KOTELCHUCK: No.

MEMBER CLAWSON: -- for whoever. There's nothing in this file about, you know, this is the thing. And I understand, you know, what Doug is saying in this. But the thing is, is if they did chelate this person, and there are the significant information in their bioassay or their records from that standpoint, did we find any?

MS. GOGLIOTTI: Not to the level you'd

expect. There is clear evidence that the chelation occurred. But there's no reports documenting the chelation, things that you would expect to find in the records.

CHAIRMAN KOTELCHUCK: But there are arguments that have now been given to suggest that whatever was --- that there was no information post-chelation, during and after chelation, that would be useful in assessing the exposure of the individual and, therefore, their Probability of Causation.

MR. FARVER: This is Doug. I don't believe there was any information in the DOE files about the incident or even the word chelation. So when we reviewed the CATI report, and we see, oh, the employee mentions chelation, we're trying to correlate that with what's in the DOE files.

CHAIRMAN KOTELCHUCK: Yes.

MR. FARVER: And we didn't find it. So all we said was, gee, the employee says this, we didn't find it in the files, maybe there's more information out there.

CHAIRMAN KOTELCHUCK: Right. And that's appropriate. It was reported. It sounds to me as if the Medical Department did not keep the kind of records that they should have kept. But our assignment is to figure out what exposures the people had that might result in a cancer.

MEMBER CLAWSON: Yes but, Dave, this is Brad. This is one of the issues that we've got, is there's gaps in the data. And this is what Doug's trying to say. If there was a chelation, be it the Medical Department, be it whoever, there still should have been more information in there, especially chelation. After chelating somebody, they usually have an awful lot of follow-up bioassay for a while.

MR. SIEBERT: But, Brad, I was thinking your question was, was there evidence of a substantial intake, I mean, prior to the chelation?

MEMBER CLAWSON: Yes and ---

MR. SIEBERT: What I was taking from Doug's statement is that there, I mean, setting the medical records aside, the dosimetry records, the

internal bioassay records, there should be a whole, there should be clear evidence of an intake.

MS. GOGLIOTTI: There is.

MEMBER CLAWSON: Right.

MR. SIEBERT: There is.

MEMBER CLAWSON: And what we're saying is that they're lacking. And I understand that.

MR. HINNEFELD: This is Stu Hinnefeld. I have to step in here. What is lacking? We have frequent and significant bioassay records. What would we learn? You know, I don't understand what's the benefit of knowing anything else?

MS. GOGLIOTTI: I think we don't know what we don't know at this point.

MR. HINNEFELD: Well, but we know the bioassay records.

(Simultaneous speaking.)

MR. HINNEFELD: But we know the bioassay record. What else do we need to do the dose assessment?

MEMBER CLAWSON: Yes.

MEMBER MUNN: I have to agree with

Stu's question.

CHAIRMAN KOTELCHUCK: Yes.

MEMBER MUNN: We have the records that we need.

CHAIRMAN KOTELCHUCK: Yes, we do.

MEMBER CLAWSON: So here's a question. And this is, I think, what they're getting down to is, so if you just have one bioassay, and that is substantial, that's plenty for the --

MR. HINNEFELD: But that's what they said, Brad. They said they had a substantial bioassay record. There are bioassays there, right?

MR. SIEBERT: There are multiple bioassays the day after the incident, the day after that, and daily bioassay pretty much for the next few months.

MEMBER CLAWSON: Okay.

MR. SIEBERT: We're very clear on the record.

CHAIRMAN KOTELCHUCK: Okay, that's good. That's excellent. And I'm convinced that

the argument has been made that, once the chelation process starts, we're no longer assessing, or we're assessing exposure plus the effects of chelation.

But if there's substantial data, and people are saying there are, there's substantial data actually after the incident, right, for the next few days, then I think this is an observation, a useful one.

We don't usually spend quite as much time on observations. But I think it remains an observation and a good point, but we're not lacking what we need to make an assessment of the Probability of Causation.

MEMBER CLAWSON: This is Brad. I guess I'm misunderstanding. And I understand what Stu is saying. So you're telling --- and I just want to make sure, because I haven't been able to look at all this data and stuff like that. And, Doug, you've looked at this, you've looked at this case.

My question is, is I was under an impression that we do not have enough data. You

felt that there should be more. That was my understanding on this. And if we've got plenty, I understand what you're saying, Stu. That's great.

MR. FARVER: This is Doug. And it's not that they don't have the bioassay data, okay. There's dozens of follow-up bioassays. That's why this is only an observation and not a finding.

The observation was that all we found was a little indication in the record that says nasal and saliva contamination with chelation. That's it, one little piece of information.

But there should have been more information in the file describing what the incident was, what the levels of contamination were, and so forth. And that's why we made it an observation. Because there should have been, we felt there should have been more information in the records.

MEMBER CLAWSON: And I understand now better, and forgive me. And I agree with Stu. If you've got that in there, this is just, there's just

not enough information with it. I agree with the observation.

CHAIRMAN KOTELCHUCK: Yes, yes. I do, too. And I think this has been useful discussion. But I think we could move on now.

MR. HINNEFELD: If I just might make one point, we don't ask --

CHAIRMAN KOTELCHUCK: Sure.

MR. HINNEFELD: -- we don't ask the DOE for the medical records of every claimant. We ask them for the X-ray exposure information for the claimant.

CHAIRMAN KOTELCHUCK: Right.

MR. HINNEFELD: So we don't ask for the entire medical record for the claimant, because we don't ask for things we don't need to do the dose reconstruction. In this case, we had the bioassay records. We didn't need anything from a medical record to do the dose reconstruction.

CHAIRMAN KOTELCHUCK: Yes. Okay. I propose we go on. It's a little after 12:00. Normally we break around 12:30. And so if folks

who are on the line are open, let's do -- are there, how many more observations are there? There's another one at least. Are there more, and can we resolve them?

In other words, let's work for another 20, 25 minutes. If that's okay with people, if they want to take a break now and go to lunch?

MEMBER CLAWSON: Let's keep working; it's still early.

CHAIRMAN KOTELCHUCK: Yes. Yes, I'm sorry. I again said lunch. And you guys, it would be breakfast if it's anything. Okay. If I don't hear any call for a break, let's go on to the next observation. And we'll go on until about 12:30 here on East Coast time. Okay, Observation 2, 404.

MS. GOGLIOTTI: Okay. Observation 2 is again related to the chelation. And this observation states that we were unable to locate any guidance regarding how you should model a chelation, other than what's in OTIB-22.

CHAIRMAN KOTELCHUCK: Yes.

MS. GOGLIOTTI: And OTIB-22 is

exclusively used for wound intake which would not be applicable to this case.

CHAIRMAN KOTELCHUCK: Right.

MS. GOGLIOTTI: And NIOSH responded that general guidance is provided to dose reconstructors for training and on a case by case basis. But there is some guidance in OTIB-22, and there's also guidance in the Rocky Flats TBD which is the largest site for the number of chelations. And NIOSH says that they intend to include more guidance in OTIB-60.

CHAIRMAN KOTELCHUCK: Right. But I think, yes, I think we've had a good, robust discussion on chelation. I'm not sure we need -- I do recommend closure. And, well, since this is an observation, it's not so much closure as we --- do we need any further --- maybe I'll ask. Do we need any further discussion on this?

MEMBER MUNN: Not for me.

CHAIRMAN KOTELCHUCK: Anyone?

Then let's --- that's interesting. And let's go on, if we may.

MS. GOGLIOTTI: Finding 404.1.

CHAIRMAN KOTELCHUCK: Yes.

MS. GOGLIOTTI: And the finding said that NIOSH failed to consider finger ring monitoring. And NIOSH responded that they agreed that a finger ring monitoring should have been used and included.

And when they included this information, it did not change the final compensation decision. The original PoC was 49.07 percent. And the updated was 49.76, so very close to the threshold but not quite there.

CHAIRMAN KOTELCHUCK: Right, right. Let me understand. There was finger ring monitoring, and it was not considered?

MS. GOGLIOTTI: Correct.

CHAIRMAN KOTELCHUCK: Okay.

MS. GOGLIOTTI: I believe this person had a skin cancer on the hand.

CHAIRMAN KOTELCHUCK: Yes. Okay. That's certainly -- if there was monitoring and it was not considered, then this is appropriately a

finding. It edges up very much closer to that 50-percent level, but it does not reach it. And so this did not impact. The final decision remains the same.

And I'm supposed to say we do enough blinds and things like that to say that we're not uncertain about our process in getting to 49.76. So sounds like this should be closed as a finding. What do other people think on the -- first, Subcommittee members.

MEMBER CLAWSON: Well, this is Brad. So it is a finding. I guess in the future they're going to be taking this information into account.

MR. SIEBERT: Brad, this is Scott. The information wasn't taken into account in the first place. We're saying it's an error that it wasn't. It's not that we normally do not take it into account. It's an error that the dose reconstructor should have and did not.

CHAIRMAN KOTELCHUCK: Right.

MEMBER CLAWSON: Oh, okay. That's all I wanted to make sure, that it was. I'm good with

it. Let's --

CHAIRMAN KOTELCHUCK: Same, yes.

MEMBER CLAWSON: -- move on.

CHAIRMAN KOTELCHUCK: It was a simple, it was a mistake and didn't follow procedures.

MEMBER CLAWSON: Well, I'm sorry. I was under the impression that this was one that wasn't in the process. Thank you, Scott.

CHAIRMAN KOTELCHUCK: Yes, good. Okay. So this will be closed unless I hear any objection or question.

MEMBER BEACH: No objection here, Dave.

CHAIRMAN KOTELCHUCK: Okay. Alright.

MS. GOGLIOTTI: Okay.

CHAIRMAN KOTELCHUCK: So be it. So be it, closed.

MS. GOGLIOTTI: 404.2 is the next finding.

CHAIRMAN KOTELCHUCK: Yes.

MS. GOGLIOTTI: And this finding is about a failure to apply risk correction factors

to missed neutron dose. And NIOSH response says that they agree the correction factor should be applied to missed neutron dose since it was applied to all other radiation types.

CHAIRMAN KOTELCHUCK: Yes. I'm not sure what you mean by risk correction factor. Is this somebody working in a containment box or something?

MS. GOGLIOTTI: I am not sure off the top of my head. I would have to look into the case file.

CHAIRMAN KOTELCHUCK: I mean, I just don't know. I don't know why there was a risk correction factor in there that should have been applied.

MR. SIEBERT: I believe that's because it's a geometry factor due to the fact that the hands are further out than where the neutron dosimeter would lay.

CHAIRMAN KOTELCHUCK: I see. Okay, that's fine. No, clear, clear. Thank you. Makes complete sense. And they're working in a

glove box. So, right. Then NIOSH agrees. This is a quality-assurance issue.

MR. KATZ: Right, just like the last one.

CHAIRMAN KOTELCHUCK: Yes, yes. Okay. And it did not impact the final outcome, sounds like it is appropriate to close it. It is a finding, an important one. And I think it should be closed now. Are there questions about it or objections?

MEMBER MUNN: No.

CHAIRMAN KOTELCHUCK: Okay. Alright. Folks, good. Then I think it is closed. Then it is closed.

MS. GOGLIOTTI: Okay.

CHAIRMAN KOTELCHUCK: Alright. Let's go on --

MS. GOGLIOTTI: The next finding is 404.3.

CHAIRMAN KOTELCHUCK: Yes.

MS. GOGLIOTTI: And that is a failure to apply attenuation factors. NIOSH's response

was that it agreed that an attenuation factor could have been applied to the hand and forearm for periods when the shallow dose was assigned as electrons. So essentially, NIOSH and SC&A are in agreement.

CHAIRMAN KOTELCHUCK: Right, yes.

MS. GOGLIOTTI: And the use of an attenuation factor doesn't impact the outcome of the case. So we recommend closure.

CHAIRMAN KOTELCHUCK: Right. Now, right. Okay, that's another aspect of, that's another reflection of the hand and forearms being closer to the site of the radiation than the badge. Okay, seems like this should be closed unless there are objections.

MEMBER MUNN: None.

CHAIRMAN KOTELCHUCK: Okay. So be it. It will be closed. This is a different kind of issue, I believe.

MS. GOGLIOTTI: Yes. The next finding is 404.4. And the finding related to the omission of argon-41 dose.

CHAIRMAN KOTELCHUCK: Yes.

MS. GOGLIOTTI: And this is something that I'm not sure if it's an artifact in the TBD, but the TBD does recommend assigning argon dose. NIOSH came back and said that the energy distribution noted for argon is part of the ambient dose and shouldn't be included in the dose reconstruction, according to OTIB-17.

And our comment was just that the TBD does specifically discuss noble gases separately from the ambient radiation exposure. And so we interpreted this to mean that argon exposure should be treated differently than the exposure traditionally considered ambient exposure.

And we would suggest adding some clarifying text in the TBD to prevent misinterpretation, if that is the correct interpretation of what they mean to be applied here.

CHAIRMAN KOTELCHUCK: Right.

MS. GOGLIOTTI: But the reason we did this as a finding, and we've never seen argon dose

actually applied, was simply because the PoC in this particular case was so close to that 50 percent.

CHAIRMAN KOTELCHUCK: Yes.

MS. GOGLIOTTI: And if they did include it though, it would only increase the dose, the yearly dose of about zero to four millirem which is likely too small to impact the PoC of this case, still.

CHAIRMAN KOTELCHUCK: Yes.

MS. GOGLIOTTI: Was I correct in that that was the correct interpretation of the TBD?

CHAIRMAN KOTELCHUCK: Scott?

MR. SIEBERT: I'm looking here real quick. My understanding, and I'll jump back to Matt Smith if I need specific clarification on this, but that the argon should be rolled into the ambient doses.

But in this case, specifically, you do not assign ambient dose after 1980 because the person was badged. So their badge would actually catch the component as coming from argon.

MR. SMITH: Yes, this is Matt Smith with the ORAU team. And this is a case, and it's there in the response, in the BRS. Procedure 60 covers this issue in more detail. It came out after the SRS TBD which, if you look on the date on it it's, you know, one of the earliest TBDs that's out there.

CHAIRMAN KOTELCHUCK: Yes. Okay. And this is, excuse me just a second, just reading over, trying to absorb the --- so the argon-41 certainly would have be included on any effect of any of the radioactive materials to be noted on the badge.

What is argon-41, what kinds of particles does it emit, or what kind radiation does it emit? I mean, I just don't know. I have not come into contact with argon-41, or I've not thought about it.

MR. SMITH: I'd have to crack open another resource to quote you the exact radiation types and emissions. But it's hovering, in that era certainly, anything that's electron or photon.

CHAIRMAN KOTELCHUCK: Yes, yes.

MR. SMITH: There's probably a little bit of both in emissions.

CHAIRMAN KOTELCHUCK: Right.

MR. SMITH: We're definitely capturing things both ---

MS. GOGLIOTTI: It's a beta emission.

MR. SMITH: It's like an open window and shielding parts of the dose ---

CHAIRMAN KOTELCHUCK: Alright. I'm slightly worried about the comment, Rose's comment that four millirems per year is too small to impact the PoC when the PoC was very close to 50 percent. And she said it's likely to be too small. And my feeling is, well, if it's close, then our general rule of thumb has been less than a millirem, it need not be considered. On the other hand, suppose it's four millirem?

MS. GOGLIOTTI: Well, under this argument, then NIOSH is saying that this counts as ambient dose even though it's described separately in the TBD. And so it doesn't need to be assigned

after 1980, if I'm understanding them correctly.

CHAIRMAN KOTELCHUCK: Yes. That's right. You're clarifying it for me too. That is correct. So it doesn't matter if it goes to four. If it were four millirems per year, you would be picking it up in the radiation measurement, in the radiation assessment. And that's correct. You're right.

So therefore, this will not affect. It's close, but this will not affect, because it's been taken into account. And therefore, to me, that would suggest closing it. What do other people think and, again, Subcommittee members? Any concerns about this one?

MEMBER CLAWSON: No. This is Brad.

CHAIRMAN KOTELCHUCK: Yes. Okay. Alright. I don't hear --- Pardon?

MEMBER POSTON: This is John. It's fine with me.

CHAIRMAN KOTELCHUCK: Okay.

MEMBER BEACH: Yes, I'm fine too.

CHAIRMAN KOTELCHUCK: Fine, very good.

So it's closed. 404.5, we're moving along, and appropriately.

MS. GOGLIOTTI: 404.5 speaks that there was a failure to assign a pre-employment medical dose, so a medical X-ray. And NIOSH agreed that a pre-employment X-ray for the year 1984 should have been applied for the dose reconstruction.

CHAIRMAN KOTELCHUCK: Right.

MS. GOGLIOTTI: And again, this is a quality issue. And we did not find that it impacted, it wouldn't the impact outcome of the case. So we recommend closure.

CHAIRMAN KOTELCHUCK: Okay. That is, you checked that, and it did not.

MS. GOGLIOTTI: Earlier in this, when NIOSH, the 404.1 ---

CHAIRMAN KOTELCHUCK: Yes.

MS. GOGLIOTTI: -- NIOSH provided the PoC estimate. And that included the impacts of all of these findings.

CHAIRMAN KOTELCHUCK: Okay, good,

good. So this is not just, I think, this has been checked. And it does not affect the final outcome, which to me means that closure is appropriate. Again, do I have --- why don't I ask are there objections to closing it?

MEMBER MUNN: None here.

CHAIRMAN KOTELCHUCK: Okay. Fine. Hearing none, it is closed. Are we getting --- and there are no observations on this one.

MS. GOGLIOTTI: The observations were actually covered first. So there were observations.

CHAIRMAN KOTELCHUCK: Oh, yes, of course there were. Yes, yes. So we're up to 405. It is 20 after 12:00 East Coast time. I think this may be a reasonable time to stop for a longer break, a breakfast or lunch break, or for some of us a work break until we come back. Why don't we come back at 1:30 East Coast time, that is give ourselves an hour and ten minutes?

MEMBER MUNN: That sounds fine to me.

CHAIRMAN KOTELCHUCK: Okay.

MEMBER MUNN: And, Dave, just for your information, I finally got my chart of the nuclides off my shelf.

CHAIRMAN KOTELCHUCK: Alright.

MEMBER MUNN: Argon-41 is beta and gamma, no surprise.

CHAIRMAN KOTELCHUCK: Okay, good. Alright, good, good. You learn something every Subcommittee session, or remind yourself. Okay. Thank you, all. And we will see you then at 1:30 East Coast time.

MEMBER MUNN: Okay.

CHAIRMAN KOTELCHUCK: Bye-bye.

MEMBER MUNN: Bye-bye.

(Whereupon, the above-entitled matter went off the record at 12:21 p.m. and resumed at 1:32 p.m.)

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

1:32 p.m.

CHAIRMAN KOTELCHUCK: Okay, good. Well, as I see it, we were getting ready to do 405, but I remember that 405 is one of the duplicate cases, right?

MS. GOGLIOTTI: Correct.

CHAIRMAN KOTELCHUCK: So we don't have many more for SRS. We go now to what, 416 or something? Anyway, let's go, folks, we were at 405. We'll go down. There's a couple of observations, and three observations and two findings. And we are down to 416.1, correct?

MS. GOGLIOTTI: That is right.

CHAIRMAN KOTELCHUCK: Okay.

MS. GOGLIOTTI: Well, this is actually an observation so it's just 416 Observation 1.

MR. KATZ: Are we still on SRS?

MS. GOGLIOTTI: Yes.

CHAIRMAN KOTELCHUCK: Yes we're on it. Yes, finishing up SRS. You say you've changed it to an observation?

MS. GOGLIOTTI: No, it was always an observation.

CHAIRMAN KOTELCHUCK: Oh, okay. Okay, very good. Fine.

MS. GOGLIOTTI: So the observation states that we believe the case is eligible for the SRS SEC and it wasn't flagged as such. And NIOSH responded basically saying that when they processed the claim, it was not eligible to be included in the SRS SEC.

(Simultaneous speaking.)

CHAIRMAN KOTELCHUCK: Okay. Now that is not written down here, right? Oh, this is your old write-up before you folks realized that the person should be in the SEC?

MEMBER MUNN: That was last year.

CHAIRMAN KOTELCHUCK: Yes, 4/9.

MS. GOGLIOTTI: The case was processed quite some time ago now, probably several years ago.

CHAIRMAN KOTELCHUCK: Right, right. So how do we classify it? I mean, it's not, let

me understand, it was not eligible for the SEC when you first analyzed it, is that it? And we've since --

MS. GOGLIOTTI: When NIOSH analyzed the case it was not eligible for --

CHAIRMAN KOTELCHUCK: Right.

MS. GOGLIOTTI: -- there wasn't an SRS SEC at the time. But since then, when we reviewed the case there was in fact an SRS SEC.

CHAIRMAN KOTELCHUCK: Right. In a way we should not, I guess we should not say that we're analyzing this because there is no need to do it. Right? So this is neither an observation nor a finding. It's --

MS. GOGLIOTTI: I mean, we're simply observing that the case then has fallen into the SEC?

CHAIRMAN KOTELCHUCK: Right, right. Is that, where is that so written? Is it in there?

MS. GOGLIOTTI: Well, it is written in the finding text or the observation text in the dose reconstruction report.

CHAIRMAN KOTELCHUCK: Okay, alright. Okay. I'm just scrolling through. Okay, I'm just, it's just an issue of how does it get recorded. You did do work on it and it was work that, you know, SC&A should be compensated for. But do we record it as a finding for future --

MS. GOGLIOTTI: It's not a finding; it's an observation. We were simply giving this attention --

(Simultaneous speaking.)

CHAIRMAN KOTELCHUCK: Okay, yes, yes. That's good. Okay, and all of those are observations. Okay. And so do we go on to SRS 440?

MS. GOGLIOTTI: Well, we have to cover 416 Observation 2.

CHAIRMAN KOTELCHUCK: Okay, let's see that.

MS. GOGLIOTTI: And that observation states that the incorrect organ dose correction factor was stated in the dose reconstruction report. And NIOSH agreed that while they did state

the incorrect dose correction factor, they did in fact use the correct one. This was simply a QA error. It doesn't impact the actual dose reconstruction, it impacts the quality of the dose reconstruction report.

CHAIRMAN KOTELCHUCK: Okay, alright. Yes. Alright, then we don't -- is there any comment by anybody? I don't think there need be.

MEMBER BEACH: No problem.

CHAIRMAN KOTELCHUCK: Okay. Let's go on.

MS. GOGLIOTTI: Observation 3 states that NIOSH does not consider all the x-ray examination records that were found in the DOE files. And NIOSH responded that standard practice has been omitting medical x-ray claims, or only including those that occurred during the claimant's employment.

This particular EE had reported x-rays that were done after their employment, which is somewhat unusual. And since they were outside of the covered employment, they're not required to be

covered.

CHAIRMAN KOTELCHUCK: I'm not finding the write-up that you're talking about. I'm so sorry.

MS. GOGLIOTTI: Did you click on the plus sign next to 416? It's a blue plus sign?

CHAIRMAN KOTELCHUCK: No, I didn't. That's it. I haven't found it yet.

MS. GOGLIOTTI: So if you search for 416 and then scroll down to Observation 3. And then the little blue plus sign.

CHAIRMAN KOTELCHUCK: Hold on a minute. Okay. Maybe I'm the only one having this, I don't know. 416 Observation 3. I don't see any sign, any 416 Observation 3. Okay, finally, I've got the x-ray exam records. Sure, sure.

Okay, thank you. I've located it and I hope everybody else has 416 Observation 3. Do go ahead. Or you just finished actually while I was searching. Maybe I'll take a read and others can go on.

MS. GOGLIOTTI: And this is only an observation again. We understand that it's outside the covered employment.

CHAIRMAN KOTELCHUCK: Yes.

MS. GOGLIOTTI: But we've pointed it out because we believe that the dose reconstruction report would have benefitted from including discussion.

CHAIRMAN KOTELCHUCK: Yes, yes. Right. It was not eligible to be included. Okay, that sounds fine. What should we go on to?

MS. GOGLIOTTI: Okay.

CHAIRMAN KOTELCHUCK: Right.

MS. GOGLIOTTI: And the next finding is from Tab 416 Finding 1. And the finding states that there was incomplete accounting of fitted neutron dose. NIOSH agreed.

They said that they incorrectly selected the reactor ops SD versus the reactor ops in their workbook tool for several years, and that resulted in the omission of neutron dose for those years.

CHAIRMAN KOTELCHUCK: Right, right. How does SD differ from plain old reactor ops?

MR. SIEBERT: The difference is SD stands for shutdown, it's when the reactors are shut down versus operating, so there's no neutron component.

CHAIRMAN KOTELCHUCK: Yes, right.

MR. SIEBERT: And this was Scott, by the way.

CHAIRMAN KOTELCHUCK: Yes, thank you for clarifying that. Okay. PoC changed to 46 percent. Again, not compensated but that's okay. Then this should be, seems like it should be closed. Are there any concerns or objections?

MEMBER BEACH: No.

MS. GOGLIOTTI: This is just an error that the dose reconstructor reflected in the workbook. This is not an automated feature of the workbook. Is that correct, Scott?

MR. SIEBERT: That --

MEMBER MUNN: To me that's just another QA error.

CHAIRMAN KOTELCHUCK: Yes. Sounds

like we should close it. Okay. That will be closed.

MS. GOGLIOTTI: Okay. The next finding is 416.2. And the finding is about incomplete accounting of missed neutron dose. And this is essentially the same as 416.1.

CHAIRMAN KOTELCHUCK: Yes.

MS. GOGLIOTTI: But because of the finding coding, we have to have a separate finding for missed and measured.

CHAIRMAN KOTELCHUCK: Okay. I see. Correct. So that is the same issue and should be closed unless I hear objections. I do not. So closed.

MS. GOGLIOTTI: Okay, 416.3 is the next finding. It has to do with TBD guidance not being followed from the years 1953 through 1963. This was kind of an interesting -- we were under the impression that NIOSH was attempting to assign unmonitored fission product dose when in fact they were not trying to do that.

And the recommendations are very much

similar except for there's one deviation and so we thought that they were not following that when they were actually following guidance for measured dose.

And they were modeling it after the measured tritium dose, which I did confirm is consistent with what is in the TBD. We were just not understanding what was done.

CHAIRMAN KOTELCHUCK: Okay. Right. Right? The use of this should be, hold it just a minute. This is a finding? So basically SC&A agrees with what NIOSH has done?

MS. GOGLIOTTI: Yes. Let me clarify what they actually were intending of doing and it does make sense with the guidance.

CHAIRMAN KOTELCHUCK: Yes, yes.

MR. SIEBERT: This is Scott then. The question is should it be withdrawn since we did it correctly?

MR. KATZ: Yes.

CHAIRMAN KOTELCHUCK: Yes. This should be an observation.

MR. SIEBERT: I was asking if it actually, the finding itself should be just removed, withdrawn in toto, I mean, because it's not an observation. It's nothing wrong, there's no corrective action, there's nothing. It's just --

CHAIRMAN KOTELCHUCK: Well, it was a comment by, it was a misunderstanding on SC&A's part. But it was a comment to see if, you know, if there was a problem. There was no problem. You're right, you're absolutely right. There was no error on NIOSH's part so there can be no finding.

MR. SIEBERT: Right.

CHAIRMAN KOTELCHUCK: But was it reasonable, I mean, there will be many times, there have been in the past and there will be in the future where SC&A will analyze something and then not realize certain facts on the ground that were there. And they will be informed of it and they will, it will be closed.

It seems to me it's a recent, it's an observation and a reasonable one given that they

did not know that when you explained it. They know it now in that sense. And I don't think, if you will, a finding is in any way, excuse me, an observation is in any way a negative, it's not a negative mark against anybody. Right? It's just clarification.

So I would actually opt it to be considered, moved to be an observation. And I wondered what do other Board Members think?

MEMBER BEACH: No.

CHAIRMAN KOTELCHUCK: It's certainly not a finding.

MEMBER BEACH: No, no.

CHAIRMAN KOTELCHUCK: Matter of fact, it cannot be.

MEMBER CLAWSON: It's not a finding. It would be an observation.

CHAIRMAN KOTELCHUCK: Right, I agree.

MS. GOGLIOTTI: Okay.

CHAIRMAN KOTELCHUCK: Okay, observation it is.

MS. GOGLIOTTI: I'll move that to an

observation.

CHAIRMAN KOTELCHUCK: Yes.

MS. GOGLIOTTI: Finding 416.4.

CHAIRMAN KOTELCHUCK: Yes.

MS. GREENBERG: It has to do with an inconsistent method used to assign unmonitored fission product dose. And here NIOSH agrees that in order to be consistent, they should have applied it, so we are in agreement.

CHAIRMAN KOTELCHUCK: Yes. Right, okay. This claim, yes, of course, this qualifies through the SEC inclusion, sure. Good. And so the fact is I was just getting ready to ask a question. Well, are you sure it will not have a significant impact on the dose?

And of course you reminded me then on the next line that it's part of the SEC. So obviously it does not matter what the dose is that you've calculated.

Alright. Then I believe this should be closed, again. I will ask if there are any objections.

MEMBER MUNN: No.

CHAIRMAN KOTELCHUCK: Simple case, I think. Good. So be it, it's closed. And is that the last one? Not quite.

MS. GOGLIOTTI: We have one other SRS observation and then that will close that out.

CHAIRMAN KOTELCHUCK: Okay.

MS. GOGLIOTTI: This comes from Tab 440 and this is Observation 1.

CHAIRMAN KOTELCHUCK: Yes.

MS. GOGLIOTTI: Here we had kind of an unusual circumstance. The EE was diagnosed with [identifying information redacted].

CHAIRMAN KOTELCHUCK: Okay, ah. Okay.

MS. GOGLIOTTI: NIOSH selected the bone risk model. And we had some questions on what was done because this is a leukemia rather than a bone cancer.

And when we investigated this further we came across the ICD-9 code, which is a code assigned by DOL as [identifying information

redacted], which is kind of the opposite of [identifying information redacted], which involves an [identifying information redacted] of red blood cells.

So when I looked into past claims that we've evaluated with the same cancer, a different ICD-9 code was selected. And that code triggers how IREP is run or which model is selected for IREP.

And so we were curious if the correct code was selected. And NIOSH came back and said that this code is in fact assigned by DOL so it's not technically under their purview. But the other ICD-9 code could have been selected.

When they select that code, it prompts you to run both a bone and a multiple myeloma IREP run. And in this case, the bone was in fact the most claimant-favorable and therefore it doesn't impact the PoC of this claim. Selecting a different IREP model didn't impact this case.

CHAIRMAN KOTELCHUCK: So I read this and I was not aware of this, the IREP code, the code, the ICD code is determined by Department of Labor,

by their staff.

MS. GOGLIOTTI: Right.

MEMBER MUNN: Well, usually.

CHAIRMAN KOTELCHUCK: Yes. I mean, what would be, it clearly will not affect, change the final outcome, but how would you deal with the problem of believing that the ICD code is not the best one, a better one or a proper one should be used? How would one deal with that?

MR. KATZ: So in these situations, since it's not under NIOSH purview, I mean, the most that can be done is a memo can go to DOL saying for this case we believe, if that's what NIOSH believes, the code may be in error and you may want to check this.

CHAIRMAN KOTELCHUCK: Yes.

MR. KATZ: And explain why in the memo. And then DOL can consider that. But that's what we would do normally.

CHAIRMAN KOTELCHUCK: Right.

MEMBER MUNN: Yes, we've done that in a couple cases but tried to avoid it if we possibly

can.

CHAIRMAN KOTELCHUCK: Of course, and I understand.

MR. KATZ: There's absolutely nothing wrong with sending a memo over if it makes sense to do so, if it helps.

CHAIRMAN KOTELCHUCK: Well, I mean, in this case, it doesn't.

MR. KATZ: In this case, it doesn't sound like it has any impact anyway.

CHAIRMAN KOTELCHUCK: Well, but that's irrelevant.

MR. KATZ: It sounds like they've been, from what Rose was saying, they've been coding these a different way. They coded this one this way. So it doesn't sound like it's a systemic error on the part of DOL for this case.

CHAIRMAN KOTELCHUCK: Well --

MR. KATZ: I don't know what the benefit is of sending a memo over.

CHAIRMAN KOTELCHUCK: Well, does that mean that we have had other cases of the

[identifying information redacted]? I mean, this is not the first case.

MS. GOGLIOTTI: I'm not positive. I may have looked in the actual NIOSH database.

CHAIRMAN KOTELCHUCK: Yes. I mean, I'm concerned that this may be the first case or one of the very few and that there wouldn't seem to be a precedent.

And it sounds to me as if there would be some value in looking and suggesting that things that fall into this general category under ICD-9 should be looked at a little differently or they should consider in future runs.

MR. KATZ: Well, it sounds like what Rose is saying that in our claimant database, a lot of other cases, and they were all done, in Rose's perspective, correctly. This is an outlier, it was done differently and that's why they were questioning it in the first place. It has no impact on this case.

CHAIRMAN KOTELCHUCK: It certainly doesn't.

MR. KATZ: But it looks like this case may have been in error. It may have been that we don't know something that DOL does know about this case.

CHAIRMAN KOTELCHUCK: I don't know.

MR. KATZ: So anyway, it maybe is an outlier. If you want, you know, Rose can write up a little memo about the circumstances here and we can, you know, send that over to DOL and they can have a look at it to check to see for this case. It's not going to impact this case.

CHAIRMAN KOTELCHUCK: No, that's right.

MR. KATZ: So I don't know what they would do with this anyway unless they found that there's some greater problem with other cases.

CHAIRMAN KOTELCHUCK: Well, I mean, that's the issue. The issue that other cases -- well, so we know that previous cases have been handled, from SC&A's perspective, properly. To me it's such a rare event that I would tend to, I actually lean towards sending a note.

But I wondered again what other Board Members think. Should we send a note on this? I think it's so rare that from one staff member to another, there may be --

MR. KATZ: There's no harm in it, Dave. So, Rose, just write this up in just a little narrative with the case information so it's easy to identify. You know, just a little short note from SC&A to me.

I will forward that through to NIOSH who can send it on to a contact at DOL and they can do what they want with the note but then we'll have at least informed them that we found this and there may be a problem somewhere.

MS. GOGLIOTTI: I can certainly do that.

CHAIRMAN KOTELCHUCK: I think I would like that. I would like that to be done.

MR. KATZ: Fine, let's do that.

CHAIRMAN KOTELCHUCK: Great. Well, that brings us to the end of the SRS cases here.

MR. SIEBERT: Dr. Kotelchuck, this is

Scott. I hate to keep doing this to you, but I think there's still an additional finding that we had to look at from the last meeting for the Savannah River case.

CHAIRMAN KOTELCHUCK: Is there? Okay, I did not remember that, but good.

MR. SIEBERT: And Rose can correct me, but I think it's 356.6.

CHAIRMAN KOTELCHUCK: Okay, let me get my notes out here. I not only don't mind you reminding me, I thank you for reminding me. It's easy for us to overlook things as we go from meeting to meeting. And let me just see in my notes. One second. Pardon me. Okay, good. That would be, you say 356?

MR. SIEBERT: Yes, point six, correct.

CHAIRMAN KOTELCHUCK: 356.6. That, I believe we have that in something, in the 14 through 18? Let's see, did you send that to us, Rose?

MS. GOGLIOTTI: This is still in the BRS.

CHAIRMAN KOTELCHUCK: Okay.

MS. GOGLIOTTI: So if you just simply --

(Simultaneous speaking.)

CHAIRMAN KOTELCHUCK: Oh, it is okay. Fine, alright. One minute. Try and find it there. 359. What page is it on?

MS. GOGLIOTTI: Well, the BRS doesn't have pages.

CHAIRMAN KOTELCHUCK: You're right, it doesn't. Right. I'm just scanning down. I'm on 359. Do I have the right one, or is it going up?

MS. GOGLIOTTI: If you just [hit] Control F and then type 356.6, it will pull it right up for you.

CHAIRMAN KOTELCHUCK: Control F, okay. Thank you. Well, very good, 356.6. Thank you. Not all of us know this so it'll be another thing we put in. Very good. And fine.

MS. GOGLIOTTI: Well, I spend a little bit more time in the BRS than most people.

CHAIRMAN KOTELCHUCK: Yes. Alright.

MS. GOGLIOTTI: This finding is --

CHAIRMAN KOTELCHUCK: Where it says, to me it says, I'm sorry, this is new for me. So find, next or open? Open full search, right?

MS. GOGLIOTTI: This is in progress.

CHAIRMAN KOTELCHUCK: Okay. Well, it did not give me -- I have 356.6, pardon me. Enter, should I hit enter?

MS. GOGLIOTTI: Yes.

CHAIRMAN KOTELCHUCK: Right.

MS. GOGLIOTTI: It should pull up 356 for you. It's about a quarter of the way down the page.

CHAIRMAN KOTELCHUCK: Okay. Hold it. I'm sorry to waste the other Members' time as I search around. Why don't you begin?

MS. GOGLIOTTI: Okay. This finding says there was an inconsistent assignment of unmonitored, slash, environmental tritium dose. And we did begin this at the last meeting.

CHAIRMAN KOTELCHUCK: Yes.

MS. GOGLIOTTI: And NIOSH has since responded. There's a White Paper here that I did

not see. Oh, updated last week, that's why. Let me download this White Paper. It doesn't seem to be downloading. So perhaps we can start with the Hanford ones and when we come back to it, we can have it pulled up for you.

CHAIRMAN KOTELCHUCK: Okay. So you say there's something that you had not, you haven't had a chance to look it over?

MS. GOGLIOTTI: I have not seen this response.

CHAIRMAN KOTELCHUCK: Okay.

MS. GOGLIOTTI: Let me --

(Simultaneous speaking.)

CHAIRMAN KOTELCHUCK: Well, and that -- okay.

MS. GOGLIOTTI: Nicole, are you still on the line?

MS. BRIGGS: Yes.

**HANFORD**

MS. GOGLIOTTI: Do you want to start with your first Hanford case? I'm having some trouble pulling it up here.

MS. BRIGGS: Sure.

CHAIRMAN KOTELCHUCK: Yes, that would be good.

MS. BRIGGS: Do you want to put up the Hanford BRS?

MS. GOGLIOTTI: That's what I'm working on right now.

MS. BRIGGS: Oh, okay.

CHAIRMAN KOTELCHUCK: Now that was --

MS. GOGLIOTTI: This was the same, just at the very top of this BRS entry. Go all the way up. It doesn't always cooperate with us here.

CHAIRMAN KOTELCHUCK: Right.

MS. BRIGGS: Do you want me to start or do you want to wait until you can get the file up?

MS. GOGLIOTTI: There we go.

MS. BRIGGS: Okay.

MS. GOGLIOTTI: Go ahead.

MS. BRIGGS: Alright. Okay, so this is the first Hanford finding of the set. It's number 343.1.

CHAIRMAN KOTELCHUCK: Okay.

MS. BRIGGS: Yes, this is a minor issue that I don't know if it's come up in the past but I know we'll see it again a couple of times maybe even in this finding set. It has to do with the recorded photon doses that are calculated using dose conversion factors with AP geometry.

There are procedures in the external dose implementation guide that recommend that for cases involving the lung along with a few other organs, when the dosimeter is worn on the chest, then the rotational dose conversion factor should be applied along with some correction factors that are published in that section of the guidance.

And let's see, I guess NIOSH did agree that the rotational geometry would be claimant-favorable for this case. But the change has a very, very small effect on the assigned dose and the PoC.

In our BRS exchange, we did ask if the Hanford workbook tool had been changed to include that protocol. And NIOSH did provide us with a list of the updated tools. And we reviewed the

updated Hanford tool for the changes and everything was there. So we recommend closing this finding.

CHAIRMAN KOTELCHUCK: Right. Okay. And SC&A and NIOSH are in agreement. The PoCs have been calculated, recalculated and they're nowhere near compensability.

MR. SIEBERT: This is Scott. I am so sorry. The SC&A person who's handling these, I just didn't recognize your name. I'm sorry, could I get that again?

MS. BRIGGS: Oh, sure. I'm Nicole Briggs.

MR. SIEBERT: Hi, Nicole. I'm sorry, I just want to make sure I was talking to the right person.

MS. BRIGGS: That's okay.

CHAIRMAN KOTELCHUCK: Okay. It's clear-cut and seems like it should be closed. Again, any objection from our -- and this is corrected for the future.

MR. SIEBERT: Correct. All of our tools have been updated to reflect this option.

CHAIRMAN KOTELCHUCK: Right. So unless I hear objections, we will close.

MS. BEHLING: This is Kathy Behling, can I just make a comment?

CHAIRMAN KOTELCHUCK: Sure.

MS. BEHLING: Or ask a question? Is there any need to go back between the time that this workbook was updated? Is there any need for a PER or to go back to other cases? I think we may have talked about this but, Scott, refresh my memory.

MR. SIEBERT: Yes, you're right. We have discussed it. We're basically, and I'm speaking for NIOSH -- Stu, feel free to correct me if I'm wrong -- but my understanding is we'll be rolling this into the PER that updates to ICRP-116 where all the DCs change anyway. And the whole process will be different. So it will be a subset of the large PER that's covered under that.

CHAIRMAN KOTELCHUCK: Right, and that's a Hanford PER?

MR. SIEBERT: Well, that's a PER for all of the assessments we've done because the ICRP

has changed how they calculate the DCs. And it will have an impact on the whole program from ICRP-116.

CHAIRMAN KOTELCHUCK: Good, good. So it will be done in answer to your question, right?

MR. SIEBERT: Correct.

CHAIRMAN KOTELCHUCK: Good. And thank you for the question. I was beginning to think about that as we came to the end. So we have closed 343.1. 343.2?

MS. BRIGGS: Okay. Let's see, this is a finding regarding some unmonitored internal intakes. In our original finding, SC&A found that the unmonitored internal intakes for zinc, iodine and tritium were not from a reference quoted in the DR report.

And let's see, I guess the report referenced the Hanford coworker model which at the time was OTIB-39. I think since then those unmonitored doses have been rolled up into the TBD instead of in a separate OTIB.

So NIOSH responded that the correct

values were used from the TBD but the reference should probably have been included for clarity. But the document was referenced in other parts of the report, just not pertaining to these particular intakes.

So I guess, let's see. Yes. So yes, we went back and checked and saw that the original document was referenced, just not in regards to these particular intakes. So we suggest closing.

MR. KATZ: So that sounds like an observation now.

CHAIRMAN KOTELCHUCK: It does. So can we change it to an observation?

MS. GOGLIOTTI: Yes. I'll note that in the record.

CHAIRMAN KOTELCHUCK: Sure. Okay. 343.3?

MS. BRIGGS: Okay. Let's see, this finding has to do with some information that was discussed in the CATI report. So in the report, this EE mentions that he was involved in an incident and following the incident, there was a fecal test

performed.

And we noted that the results of that test were not in the record. This individual was monitored for internal exposure and missed internal exposure. And that was all included in the dose reconstruction.

So it was probably unlikely that he received some exposure that was not captured by the monitoring. But we just wanted to mention that we thought that the incident itself and the fact that this test occurred should have been described, at least in the incident section.

CHAIRMAN KOTELCHUCK: Why -- I missed, could you repeat again? -- why you thought that this did not have any bearing?

MS. BRIGGS: Well, there were monitoring records, internal monitoring records in the case file. There wasn't, the only thing is there wasn't mention of this specific --

CHAIRMAN KOTELCHUCK: Fecal.

MS. BRIGGS: -- fecal test and also there was no mention of the incident that this

worker indicates occurred. So we just thought, in fact he went on to say that, you know, he was sent home and that he was advised to separate himself from the family.

So it was enough of an incident for this individual that he was concerned. And I guess it just goes back to the idea that the incidents that are mentioned should be mentioned in some of the radiological incident sections of the DR reports.

CHAIRMAN KOTELCHUCK: Well, yes. I guess as always, if we don't have information about exposure, about a particular exposure, we can't do anything with it. I'm not clear.

MS. BRIGGS: Yes, I guess, well, the NIOSH response in our BRS was that they understand that they can't really address an incident that hasn't been documented, and they certainly can't account for tests that they don't have records for.

And they also said that the current guidance would address to all this information in that CATI section of the report with more detail. But we agree, you know, the potential dose in this

incident really can't be assigned.

So we did, you know, recommend closing simply because there was internal monitoring data which you could argue could possibly could have picked up on an exposure. So it's just more about the details of describing a detail that the individual was involved in an incident that was of some significance to him.

CHAIRMAN KOTELCHUCK: Yes, yes. There is a -- to the extent that he remembers being sent home, being separated from the family -- it's troubling, I must say.

MR. SIEBERT: Well, just one clarification.

CHAIRMAN KOTELCHUCK: Yes.

(Simultaneous speaking.)

MR. SIEBERT: [The CATI] was with the survivor, not the actual EE. So I understand that they would remember the separation thing. But whether there really was fecal sampling or not, that may be more in question.

CHAIRMAN KOTELCHUCK: Right. Or the

date at which something happened, if it happened a while ago. One remembers this happened in the past, but one may not remember what year it happened, and so it may even be in the data.

That is of some relevance that the CATI report is not with the individual who's the claimant. Yes, okay. We're recommending closure. That has to be. But the question is, is this a finding or an observation?

MEMBER CLAWSON: This is Brad. I would say this is just an observation.

CHAIRMAN KOTELCHUCK: Looks to me that way, because the NIOSH didn't do anything wrong. Data weren't lacking. And it was absolutely proper and good that SC&A pointed out that there was some concern about this. I'm glad they did. But in the end, we have to go with what NIOSH did, and what NIOSH did was correct with the data they had. So I think it's an observation. And I agree with you, Brad.

Do others have any feeling that we should change it to an observation? Or maybe

objections to changing it to an observation?

No objection. So this will be an observation. Okay? But thanks, SC&A, for pointing this out and for allowing this discussion by the Subcommittee.

Okay, 344.1.

MS. BRIGGS: Okay. Let's see, this also has to do with assignments of some unmonitored external dose. Let's see, so this individual's dosimeter was deactivated at the end of 1976, so he was not assigned dose for that last quarter.

And in our original finding we said we weren't sure why the dosimeter was deactivated and what the individual's duties were at the time. And interestingly, NIOSH actually did include unmonitored internal dose for that last quarter of 1976. And we were just questioning if the external dose should have also been included there as well.

And then NIOSH did clarify that the DOE employment records and the CATI indicated that actually he wasn't working during that time. And they said, even though it appears a little

inconsistent, the internal dose was actually included not because of a possibility of exposure, but because of just sort of the nature of the workbook tool that they were using where it would only calculate on an annual basis and not on a quarterly basis.

So that's why there was some kind of perceived inconsistency that there was internal dose assigned at one time but not external.

CHAIRMAN KOTELCHUCK: Right.

MS. BRIGGS: And we agreed with their decision not to include that for that last quarter of '76, and that the assignment of internal dose is really a part of a workbook function and not because of a possibility of an exposure.

CHAIRMAN KOTELCHUCK: Right.

MS. BRIGGS: So we suggest closing it.

CHAIRMAN KOTELCHUCK: And it resulted in an overestimate of the dose.

MS. BRIGGS: Yes.

CHAIRMAN KOTELCHUCK: Which is claimant-favorable, for sure. Okay.

MR. KATZ: I think this is another observation then, right?

MEMBER CLAWSON: Yes. This is Brad. I would say it is. I was interested to learn [it], too.

CHAIRMAN KOTELCHUCK: Yes, it is. Now, are the procedures such that this can be collected? Or will it simply continue to do the whole year, in which case it always will give an overestimate.

MR. SIEBERT: I can address that. The tool itself gives an annual dose. We can prorate that, if we so desire, for a better estimate. However, there is no reason to do that in this case because the PoC was low enough that an overestimate was acceptable.

CHAIRMAN KOTELCHUCK: Right, it certainly is. And, in fact, if we know that it will always give an overestimate, probably not a very large one, but who knows in any given case.

So it sounds as if there's not an urgent need to prorate it. And if it were close [to PoC

= 50%], than one might. Okay. Close, folks?

MEMBER CLAWSON: Yes.

CHAIRMAN KOTELCHUCK: Okay. Go on to 344.2.

MS. BRIGGS: Okay, yes. Let's see. This finding involves the assigned minimal detectable level for an americium-241 chest count.

So, in the DR report it stated that they used the MDA value for the year 1999, which was listed in the TBD as 280 picocuries. But the value used in the calculation, was 240 which was actually the MDA for a different year, for 1986. And obviously this would only result in a very small change in the assigned dose.

NIOSH did respond that although the published MDA for the 1998 MDA for americium was about 280, when you go into the actual dose records there is an MDA listed there, which is a very low number of 86 picocuries.

So, actually, in that instance, using that 86 picocuries would have been probably the most appropriate thing to do, even though the

assignment was slightly overestimated.

CHAIRMAN KOTELCHUCK: Yeah.

MS. BRIGGS: And so we agree that although the published MDA is 280, since the actual dose records list the MDA as 86 -- in the actual dosimetry records as opposed to in the TBD -- the assumptions are still claimant-favorable. So we suggest closing.

CHAIRMAN KOTELCHUCK: Right. Sounds appropriate. Objections, anyone? Comments?

Okay, we'll close, then.

MS. BRIGGS: Okay. Alright, let's see. I'll move on to 344.3. Okay, right. This is -- yeah, this one is a little confusing but I'm going to keep it really brief.

It involved assignment of a missed dose from exposure to recycled uranium in all of its components. When we were going through the IMBA files and the workbooks, we really just had trouble tracing the intake and the dose calculations through all the files. It was kind of a strange thing.

So we saw that the bioassay values that were sitting in the IMBA input, but then they weren't used to calculate the intakes and the doses for all of the recycled uranium components.

And NIOSH did clarify that some of those inputs were sort of left over from a previous calculation where I guess the bioassay data was used to then calculate the intake. But then the intake from the recycled uranium components were calculated later using a different tool, not that same IMBA file.

So it led to some confusion in what they referred to as an artifact of the IMBA program. And that led to the confusion. And NIOSH did say that -- so the correct intakes were in fact applied, and they explained how to follow all the rest of the calculations.

I should say that, as it turns out, all the doses ended up being one millirem per year or less, the annual doses, so they weren't included in the dose reconstruction.

So we agree that the correct intakes

were used to assess dose from the recycled uranium. But there just was a couple of -- another layer of confusion was that ordinarily we've seen that the recycled uranium components are calculated using a workbook called the Hanford Plutonium and Recycled Uranium Mixed Rate Workbook. But it turns out there was a different workbook used, called DR Notes.

So I think, adding all those two things together, we just had a tough time following all of the calculations through the files.

CHAIRMAN KOTELCHUCK: Right.

MS. BRIGGS: They were in fact correct, but we just honestly couldn't follow them through all the files and this workbook that we didn't know was in use. So we're going to suggest closing for that.

CHAIRMAN KOTELCHUCK: Yes. And it sounds like an awful lot of work for what I think is correctly an observation now. Right? The method was used. But I appreciate your going through this with that care.

MS. BEHLING: This is Kathy Behling.

CHAIRMAN KOTELCHUCK: Yes?

MS. BEHLING: Can I also ask Scott a question? What is a DR Notes workbook? And to me, this all still seems like a finding. But I'm not sure what a DR Notes workbook is.

MR. SIEBERT: This is a -- it's just a workbook that the dose reconstructor used to keep track of the notes on how they were doing the case so that the peer reviewer and further reviewers could follow their thought process, if need be.

It's not a controlled document, it's just additional documentation that they can have in the file to explain their thought process and to show comparisons and things like that.

MS. BEHLING: Okay. And I have seen DR Notes before, not necessarily what I would consider a workbook, but just notes indicating what they did. However, you know, from our perspective, this would still be something that we would definitely want to question. And so, but whether it's a finding or an observation, I think it was

a legitimate question to be asked.

CHAIRMAN KOTELCHUCK: Oh, it was most certainly legitimate. But it is an observation. And I'm going to ask that it be listed as an observation, unless I hear Subcommittee Members object. [PAUSE] Okay, so be it.

MEMBER CLAWSON: Hey, this is Brad. I'm not objecting in any way. I wanted to get -- well, I've got a question for Scott to follow on to what Kathy was talking about.

CHAIRMAN KOTELCHUCK: Sure.

MEMBER CLAWSON: The DR notebook, does this continue on with this case? Or I was just wondering if when you guys get done with this if this kind of disappears. Because I think this is kind of something that we've been looking for, you know, for when people look at these cases down the road they'd understand their thought process on it.

MR. SIEBERT: This actually did go with the case and was a file in for review.

MEMBER CLAWSON: Okay.

MR. SIEBERT: It was something that

went along.

MEMBER CLAWSON: Okay, because I believe, Scott, that we've been talking quite a bit about this through the years. You know, better documentation of the thought process and what we were doing. I just want to make sure this continued on with the case.

CHAIRMAN KOTELCHUCK: Okay. Good.

MS. BRIGGS: Okay. I guess I can continue?

CHAIRMAN KOTELCHUCK: Yes, close it, an observation. And we continue with 376.1.

MS. BRIGGS: Okay. Let's see, this one has to do with assignment of unmonitored intakes for plutonium and its associated radionuclides.

When we were going through the values we noticed that the plutonium-239 value was slightly lower than the published intake value. And at the time, we thought that NIOSH may have actually separated the plutonium-240 from the -239. But the coworker intake values of the TBD are labeled

as -239 plus -240 rather than plutonium-alpha.

So NIOSH then did state that they incorrectly assumed that the values were total plutonium-alpha instead of -239 plus -240. So they sort of extracted it out of -- pulled out the -239 thinking it was plutonium-alpha as opposed to it actually was -239 plus -240.

And so, you know, when we went back and checked, and we agreed and checked that the head files were corrected and just suggest closing.

As it turns out, for this one, NIOSH themselves found a typo in the CAD workbook that the year 1949 was used as the first year of intake instead of the correct value of 1961. And they made those corrections as well.

I think, when we went back to see that correction, the files must have already been corrected because we didn't see the mistake. But either way, we suggest closing.

CHAIRMAN KOTELCHUCK: Right. So a lot of years off.

MS. BRIGGS: Right.

CHAIRMAN KOTELCHUCK: And that didn't change the PoC much?

MS. BRIGGS: No.

CHAIRMAN KOTELCHUCK: Okay. Alright. So this is certainly a finding, and recommend closure. Sounds fairly straightforward to me as a case to be closed and a finding to be closed. Any thoughts, questions, from the Subcommittee Members?

MR. SIEBERT: This is Scott. I'm sorry, I just want to clarify for you since you were asking why it didn't have much impact. It's a prostate cancer, so that's why.

CHAIRMAN KOTELCHUCK: Ah, okay. Right, thanks.

MR. SIEBERT: Sure.

CHAIRMAN KOTELCHUCK: Okay. Which is not one of our 22 -- well, that's another matter. The 22 that would go into an SEC, right?

MR. SIEBERT: Correct, it is not.

CHAIRMAN KOTELCHUCK: Yeah, yeah. Okay. Anyhow, so I think it stands closed. I did

not hear any objections or concerns. Good. Close. And 376.2.

MS. BRIGGS: Okay, yeah, buzzing along. Let's see. Oh, for this finding the EE had positive whole body count results for sodium-24 and zinc-65, but the doses weren't included in the dose reconstruction.

But NIOSH clarified and said that the calculations were done for these exposures and they were all less than 1 millirem per year. So they weren't included, but that they should have included the IMBA files in the file just to show that the calculations were performed and that the exposures were addressed. And so we suggest closing.

CHAIRMAN KOTELCHUCK: Right. I do believe that would be an observation if those were used. And I can understand why it was not clear that they had been used. Alright?

MS. BRIGGS: Mm-hm.

CHAIRMAN KOTELCHUCK: Okay. So it's an observation, recommend closure. Thoughts?

MS. GOGLIOTTI: I'm sorry, but in the dose reconstruction report they didn't mention it, and they didn't include the IMBA files. So, from our perspective, we don't know that it was considered until they told us that.

CHAIRMAN KOTELCHUCK: Oh, that's correct. That's correct. But in the end, it was done, and because it was less than 1 millirem it was not included, as was customary. But that's the calculation itself, not the recording of it. The recording was not complete as it should have been. But that, to me, would still make it an observation.

MR. KATZ: Right. Right, that's consistent with other, many other cases.

CHAIRMAN KOTELCHUCK: Yeah. So it will be closed as a -- and will be an observation. But the fact that we maybe are having less findings than we might have thought at first, I'm very happy that SC&A and NIOSH are agreeing and suggests a maturity of approach such that fewer errors are found that will result in findings.

On the other hand, all of these

observations are important and the work that goes into them are worthy of the attention of the Committee, of the Subcommittee.

And so please keep on giving these observations. That's an important part of your work [SC&A], and appreciated, at least by this Board Member. Okay, closed.

MS. BRIGGS: Okay. Alright, so I'll move along to -- now we're into Tab 378. And let me see. You'll have to excuse me.

CHAIRMAN KOTELCHUCK: Sure.

MS. BRIGGS: My computer timed out so I have to get back in. I just want to see, does it start with Observation 1?

MS. GOGLIOTTI: Yes.

MS. BRIGGS: It does? Okay. Let's see. Oh yes, so this is an observation -- I guess it's something that's been discussed before and just required a little presentation. So we'll go over it quickly. It has to do with just the language involved in some of the reports regarding

if the EE is qualified for the SEC.

So the DR report says that the individual did not qualify for the SEC, but he did appear to meet the criteria for the SEC. And later NIOSH clarified that although it's only one of this individuals cancers that met the criteria, two of them did not. So the DR was performed to determine if the individual will qualify for medical benefits for those other cancers that are outside of the SEC.

CHAIRMAN KOTELCHUCK: Okay.

MS. BRIGGS: So there was just some confusion in the language. And I know that, obviously this Tab 378 was done many years ago -- not many, a few years ago. So I know that those -- I think that the DR reports have changed their language.

I think at the time it was confusing because it makes it seem like the individual wouldn't qualify. But they do qualify for at least one of their cancers.

CHAIRMAN KOTELCHUCK: Right. And if they qualify for one, then they qualify for an SEC.

MS. BRIGGS: Right, right.

CHAIRMAN KOTELCHUCK: Yes. Well, sounds like proper procedures were followed.

MS. BRIGGS: Yes. Yeah, we just kept that as an observation at the time.

CHAIRMAN KOTELCHUCK: Right, right. Okay, does anybody have comment or have anything that they wish to say about this?

I know we are moving along very rapidly, but as long as we are spending the time and the attention that each case deserves -- and we are -- then I'm very happy to see us settling all these issues as quickly as we have. Okay.

MS. BRIGGS: Alright, I'll keep moving along.

CHAIRMAN KOTELCHUCK: Yes.

MS. BRIGGS: Let's see, this is 378.1. Yes, this is also an interesting one involving information that the individual provided in a CATI interview.

In the interview he said that, I guess he testified the year, 1954, he got a rash all over

his exposed skin while he was in the PUREX facility. And he was actually taken to the hospital for observation and was there for five days. And he did have a urinalysis test that was performed following the incident.

Now, there is no documentation of this incident in the records. And there was one urinalysis record in the file, from 1957, but that was three years after the actual incident.

We just, you know, at the time we put this in as a finding because we weren't sure if the assigned doses were enough to account for that potential exposure from that incident.

Let's see. And NIOSH did agree, in our BRS exchange, that some of the wording in the DR report may have been misleading since it says that the assigned internal doses would account for any possible uptake from the incident. But since there are no records of the incident, and, you know, he wasn't tested until three years later, it's really not possible to give an assessment of what potentially could have happened.

This is similar to, I think, a finding we had talked about before. There were no records of an incident, so how are we supposed to reconstruct it?

CHAIRMAN KOTELCHUCK: Right.

MS. BRIGGS: As it turns out, right now, this EE now qualifies for the SEC. And more so in some of the records, it seems that they weren't really certain if that rash was a result of a radiological exposure. I guess it could have potentially been a chemical exposure.

But this individual did say that, at the time, he contacted the hospital to see if he could obtain the records. I'm sure that's not a problem anymore since he qualifies for the SEC.

CHAIRMAN KOTELCHUCK: Right.

MS. BRIGGS: But SC&A does agree that the dose from this incident really couldn't be assessed because there are no records. And we suggest closing.

CHAIRMAN KOTELCHUCK: Right. And yes -- now let me get it right -- we can't tell that

it was radiation-related. So what is this? Maybe I'm slowing down. What is this? Is this not an observation?

MEMBER CLAWSON: This is Brad. This would just be an observation, in my eyes.

CHAIRMAN KOTELCHUCK: Yeah. And I understand, from the earlier discussion, that NIOSH is not going to go looking for hospital records. And it's not appropriate that they do so, even in this case, because -- I guess it might have -- if there was a question as to whether the hospital could be able to diagnose the rash as radiation-related, the records would be of some importance.

MEMBER CLAWSON: The thing is, Dave, if this is a rash, we don't even know what kind of a rash it was. We don't know where it was at. And I guarantee, looking at Hanford, if somebody left that site there with a rash going to the hospital, and even if they weren't home from that and they were figuring that it was work-related, there would be some documentation on it probably.

CHAIRMAN KOTELCHUCK: Yeah, yeah.

MEMBER CLAWSON: Especially if it was five days.

CHAIRMAN KOTELCHUCK: Good point.

MR. SIEBERT: Well, this is Scott. Just to be clear, there is documentation. There are hospital records in the DOL file, which is what was reviewed. There's just no indication it has anything to do with radioactive materials.

CHAIRMAN KOTELCHUCK: Right.

MS. BRIGGS: Right.

MEMBER CLAWSON: So you have pulled the string on it. You've done what we've asked by looking at the CATI report closer. And we have found that there's nothing to tie it back, so I still think it's just an observation, nothing else.

CHAIRMAN KOTELCHUCK: And I agree. Although let's not say just an observation. It is an observation.

MEMBER CLAWSON: Sorry, my terminology --

CHAIRMAN KOTELCHUCK: Oh, that's okay.

I'm not criticizing you at all. I'm just -- I want to stimulate SC&A to continue making observations and following through because --

MEMBER CLAWSON: No, I give credit to both sides on this, because we have been on NIOSH and Scott and all these guys about following up on the CATI reviews and everything.

CHAIRMAN KOTELCHUCK: Right.

MEMBER CLAWSON: I think it's -- I'm very pleased with what I'm seeing from both sides.

CHAIRMAN KOTELCHUCK: I am, too. I am, too. So we have an observation. Unless I hear any comments or other objections, we will close it.

Hearing none, we'll go on. 379. Are there some observations?

MS. GOGLIOTTI: 379 does not have any observations.

CHAIRMAN KOTELCHUCK: No, and has no findings. Okay, fine. Full agreement. 380.1.

MS. BRIGGS: Okay. Let's see, this finding involves the assignment of missed photon dose. So we saw that only one zero reading was

assigned for each year, but some of the guidance in the TBD suggest that monitoring occurred either monthly or quarterly.

I remember at the time, this is, you know, a few years ago, we started seeing that some individuals were actually monitored, you know, wore a daily badge, but they didn't have their badge exchange until only once a year.

So that became sort of an option. So NIOSH responded by saying that since this claimant was not a radiological worker, and in some cases was assigned visitor badges, a lot of the non-rad workers were often on an annual badge exchange.

So, like I said, since this individual did wear a badge daily, he could have been on an annual exchange schedule and not necessarily a monthly or a quarterly. So we suggested closing.

CHAIRMAN KOTELCHUCK: Okay. Okay. Again, observation, is it not?

MEMBER CLAWSON: Yeah, it says it right there, Observation 1.

MS. BRIGGS: Now, is this the -- oh, I'm

sorry. No, this one --

MEMBER CLAWSON: This one was designated as --

MS. BRIGGS: This one is a finding. Yes, this was a finding.

MEMBER CLAWSON: Oh, okay.

CHAIRMAN KOTELCHUCK: Yes, it is, 380.1. But we will change it to an observation, unless there's concern or issue, and then close it. Closure with a change to an observation. Okay.

MS. BRIGGS: Okay. Alright, so we'll get to move on to Tab 381. And I think that the first one is an observation. Again, here's that same issue again regarding SEC eligibility.

So, you know, in a small period of time we had noticed the same kinds of things, but they could be resolved. So I guess this is very similar to the previous observation we discussed.

CHAIRMAN KOTELCHUCK: It is.

MS. BRIGGS: So I guess, you know, we can --

CHAIRMAN KOTELCHUCK: Well, I think we

can dispense with it quickly and appropriately because it's the same issue.

MS. BRIGGS: Mm-hm.

CHAIRMAN KOTELCHUCK: And it's an observation as you said. Okay. So unless I hear further, this is an observation and our discussion's finished with closure on it. [PAUSE]

Alright, 381.1.

MS. BRIGGS: Yes, okay. Let's see. This is involving Hanford's assignment of skin doses and OTIB-17. So I'm not sure if this issue was raised before.

So this case involves a skin cancer, so external dose was applied here using OTIB-17. Now, in the early years at Hanford, the documentation says that the dosimeter over-responded to low energy photons.

So in order to correct for this, the procedures recommend applying a correction factor of 0.6 for doses that were measured before 1957. And we found that the Hanford workbook actually applies that correction factor through 1972, which

actually results in a decrease to the assigned dose.

Now, it won't necessarily affect this case, let's see, because this individual was compensated. But it's extended through the workbook. And NIOSH said that they agreed and corrected the workbook.

And we just went ahead and checked the revised workbook and saw that the dosimeter over-response factors for low energy photons were included only to 1957. So we suggest closing.

CHAIRMAN KOTELCHUCK: Okay. And good. This is an observation.

MEMBER BEACH: Well, I mean, it did require a correction to the work --

MR. KATZ: No, that's a finding.

MEMBER BEACH: Yes.

CHAIRMAN KOTELCHUCK: That's a finding, yes. Did I say observation? I'm sorry, I meant finding. Okay. Fine. Any concerns or objections? We'll go on, close.

MS. BRIGGS: Okay. Oh, and the

second, that second finding in that list, 381.2, this is because, you know, in our DR reports, we separate the recorded doses from the missed doses.

CHAIRMAN KOTELCHUCK: Right.

MS. BRIGGS: And so the same issue would apply to missed photon dose. So it's the exact same finding.

CHAIRMAN KOTELCHUCK: Right, and we've done this before earlier. Right. Good, okay. So this should be closed. Again, unless I hear word. [PAUSE]

Okay, closed.

MS. BRIGGS: Okay, let's see. Moving along.

CHAIRMAN KOTELCHUCK: We are moving along rapidly, yes.

MS. BRIGGS: Right? Yeah.

CHAIRMAN KOTELCHUCK: Well, it's unusual, but we're starting following the old report and I've heard something about a long journey begins with a single step. So we've got a long journey ahead of us, folks. There are a lot

of cases that we have to cover in our reviews.

MS. BRIGGS: Right.

MR. SIEBERT: And this is Scott. To tell you the truth, a lot of this helps us on our side, because this is one of the ones where SC&A had put out the trial balloon on the new way to do things where they look at the two different levels of whether they're relatively straight-forward findings or more in-depth findings.

And that really helped us get into which ones, on our side, really needed a lot more of our attention on answering the question. So I just wanted to put that in your ear, that it was very helpful to us.

CHAIRMAN KOTELCHUCK: Very good, very good. And --

MS. GOGLIOTTI: And we would love to continue doing that if the Board will approve us going forward with that.

CHAIRMAN KOTELCHUCK: That's right. You know, I wondered, I do not remember precisely how the Board disposed of it. Certainly, the issue

got mentioned.

And I looked up last night to see if the transcript was out, to see if I might look over the transcript for today's meeting, because, I mean, I think we're in the process of accepting it.

MR. KATZ: Dave, this is Ted. The Board did not accept it. The Board did not sort of conclude on that. So I think that's still at the Methods. But there's nothing to say that for -- which is very interesting and great to hear -- from sort of ORAU's perspective, if this is useful to ORAU, irrespective of whether the Subcommittee actually acts differently at this point, there's no reason why ORAU can't -- if SC&A is willing to do this categorization and it's helpful for speeding things along and DCAS's sort of response, then that seems great.

CHAIRMAN KOTELCHUCK: Well, okay, I'll be a little more conservative and just say that the Board hasn't approved it. So, I'm not monitoring internal communications. I encourage them.

(Laughter.)

MR. KATZ: That's not a problem. I mean, absolutely it can make these notations or categorizations.

CHAIRMAN KOTELCHUCK: Yes. I believe the Board will in the end accept this modification, as our Subcommittee did. And the process is going on. So I'm glad to hear that. I'm glad to hear that this procedure is helpful.

Let's go on to 382.1.

MS. BRIGGS: Yes, sure. Yes, and I agree. Well, the BRS is just so helpful. You know, we're sort of having a constant exchange that we can follow along as we're generating, you know, findings and what not.

CHAIRMAN KOTELCHUCK: Right.

MS. BRIGGS: And then it's all laid out. So I think the exchange makes this process a lot easier.

CHAIRMAN KOTELCHUCK: Right, it does. Good. 382.1, and we're not terribly -- well, we're half an hour away from a break, folks. But let's do 382.1.

MS. BRIGGS: Okay. Yeah, if I can keep moving along, I may be able to be finished by then.

CHAIRMAN KOTELCHUCK: Right. Okay, fine.

MS. BRIGGS: Now, this one, let's see, 382.1. I've got to say, this is that SEC eligibility issue. And I'll say right now, I think this was originally listed as a finding, but the other issues that were similar to this were listed as observations. You know, this is that wording regarding the SEC.

CHAIRMAN KOTELCHUCK: Yeah.

MS. BRIGGS: So I think we can just close it and drop it, right?

CHAIRMAN KOTELCHUCK: Right.

MS. BRIGGS: And then just drop it into an observation?

CHAIRMAN KOTELCHUCK: Correct.

MS. BRIGGS: That's fair?

CHAIRMAN KOTELCHUCK: And that is fair. And it is the same issue, so we can close it.

MS. BRIGGS: Correct. Okay. Let me see what this one is. Alright. I guess this is another similar issue regarding monitoring schedules, 382.2.

Okay, so let's see. So this individual had a varying dosimeter exchange schedule throughout the employment. So for several years the record showed -- oh, I remember -- an external monitoring sheet, but there was no indication of the exchange schedule. So NIOSH assigned missed dose assuming an annual dosimeter exchange, you know, one zero per year.

Let's see, but we put this in as a finding. I think at the time it wasn't clear if the badge cycle was always recorded. And we thought it would be claimant-favorable to assume a quarterly or a monthly exchange.

CHAIRMAN KOTELCHUCK: Okay.

MS. BRIGGS: This is one NIOSH provided a very helpful expanded response to the finding. So since this EE generally worked in administrative offices and not in a radiation area, this

individual may not have been continuously monitored. And in this case, an annual dosimeter exchange would be appropriate.

And NIOSH also explained that, by the 1950s, the dosimeter program at Hanford was well-established and it was unlikely that the EE would have been in a radiation control area without being monitored.

But we said that -- we agreed that the EE was not always in a rad area and then would not have required continuous monitoring. But since the records were blank, we said it was kind of a call as to how to assign the missed dose.

In fact, we shuffled this case around a little bit. And some of our members said, well, if it was our team we would have assigned. Let's say we did what we're doing blind: we probably would have assigned that that additional dose.

Now, it wouldn't have had a big impact on the case, but it was one of those situations where you say, well, we know we've got these blank records, but maybe it would be claimant-favorable

to do maybe a slight overestimate or assume that maybe there was a monitoring period where maybe they weren't monitored.

So, given that, there was a little bit of back and forth, and we suggested the closing.

CHAIRMAN KOTELCHUCK: Yes. And so the calculation was done. So it should have been annual but the calculation was done quarterly or monthly?

MS. BRIGGS: Well, for some of the records that were blank, they assigned an annual exchange as opposed to another kind, say, a quarterly or a monthly.

CHAIRMAN KOTELCHUCK: Yeah, yeah. And then that was appropriate for --

MS. BRIGGS: Right. We had said, well, it certainly was -- yeah, it certainly wasn't incorrect.

CHAIRMAN KOTELCHUCK: Right, right. And the person was not a radiation worker.

MS. BRIGGS: Right.

CHAIRMAN KOTELCHUCK: Or was not an

operator. I mean, I guess a secretary in a facility, or an administrative person in a facility, let's not say they were not a radiation worker. They were exposed to radiation while doing work that was not central to the radiation processes.

MS. BRIGGS: Right. We try not to go by the job title, per se, because you may end up in a situation where an individual was labeled, say, as a secretary. But they were working in the possibility of having radiological areas.

CHAIRMAN KOTELCHUCK: Absolutely. They're out on the floor often.

So, what do folks recommend calling this? We certainly are ready to close it. And I think this may be considered an observation, since that -- other folks, help me. What would you like -- what do you think we should call it?

MEMBER CLAWSON: This is Brad. I think this is just an observation.

CHAIRMAN KOTELCHUCK: Mm-hm. Others? It does seem to me this is -- we could move either

way. By the way, the fourth line from the bottom, Rose, there's a typo. "SC&A sees this as a as judgment."

MS. GOGLIOTTI: We can get that corrected.

CHAIRMAN KOTELCHUCK: Oh, yes, I'm sure you will. Thanks, just pointing it out. But anyway, observation, folks?

MR. KATZ: This is Ted. I just think, I think that is -- it's either an observation or -- there's no defect in the dose reconstruction, so it's either a finding that's not right or it's an observation.

CHAIRMAN KOTELCHUCK: Yeah, which suggests observation. Others?

MEMBER MUNN: This is Wanda. I just remind you, you're not getting any information from Josie or from me because we're not allowed to comment on this.

CHAIRMAN KOTELCHUCK: Oh, thank you. You know, thank you for reminding me.

MEMBER MUNN: If you thought perhaps we

were absent --

CHAIRMAN KOTELCHUCK: Well, as a matter of fact, it reminds me that, when we're sitting in a meeting, it's clear when someone is not participating. Yes. So thank you for reminding me of that, because actually I did forget it. We're going through lots. And so it will be an observation, folks.

MS. GOGLIOTTI: Okay. Scott, I also noticed here that it says there's an attachment that isn't actually attached. And I believe we've seen that at one point in time. But if staff could just go in and attach that for a complete record, that would be great.

MR. SIEBERT: Yeah, I'll look at that. I'm shocked that it's not in the BRS, but I'll take care of that for you.

CHAIRMAN KOTELCHUCK: Okay, 417.1.

MS. BRIGGS: Okay. Let's see, this has to do with an internal dose workbook. And for this case, the internal dose was calculated using hypothetical intakes that were derived from air

concentrations from OTIB-18. And so there's the -- I think it's the OTIB-18 workbook.

And in that workbook, it listed the air concentration values in units of microcuries per milliliter under the column for daily intakes in units of picocuries. So we were just concerned about that.

But NIOSH explained that the doses were actually calculated correctly. It's not that they were using the air concentrations as intakes. It's just that, behind the workbook, the workbook itself converts the air concentrations to daily intakes. So it's really essentially a column that's been mislabeled.

So the output results are correct, but it's very confusing to look at. So that was the crux of that. So we suggest closing.

CHAIRMAN KOTELCHUCK: Right. And I think that's fairly clearly an observation. And it should be closed. Again, I will wait one second, and if I hear anything. David, you're on the line too but you're --

MEMBER CLAWSON: I'm good with this. This is Brad.

CHAIRMAN KOTELCHUCK: Yeah, okay. Let's close it as an observation.

427.1.

MS. BRIGGS: Okay. Yeah, I've only got about two left. Let's see, again, we can get through this one quickly. This is that same issue, I think it was the very first one I discussed, was that --

CHAIRMAN KOTELCHUCK: Oh, yes, the ROT geometry.

MS. BRIGGS: Yes. And the other one. So in this case the workbook had been corrected, so we can close it.

CHAIRMAN KOTELCHUCK: Okay. So be it. And stay with me one sec. This was closed as an observation, was it not? No, it would have been --

MR. KATZ: No, that would have been a finding if it affected the workbook.

CHAIRMAN KOTELCHUCK: Yeah, yeah.

Mm-hm. So we're saying this is -- I'm slowing down. This is an -- the ROT geometry that we used before, that was a finding?

MS. GOGLIOTTI: Yes.

CHAIRMAN KOTELCHUCK: Yeah, yeah. Okay.

MR. KATZ: That's right.

CHAIRMAN KOTELCHUCK: Yeah, yeah. Okay. I think I need a break soon, too. So let's keep going.

MR. KATZ: Well, it sounds like we only have one more case --

CHAIRMAN KOTELCHUCK: That's right, and then maybe we'll take a break.

MS. BRIGGS: Right. It's also -- and I thought this was actually the most interesting one. So this has to do with the assignment of occupational medical dose.

So, let's see. So NIOSH didn't assign any occupational medical dose for this case because they did not find any X-ray exams that were appropriate for consideration.

Now, we did find one pre-employment PFG exam that was taken in 1948 that may have been included. But this is a -- I think it's an example of a bigger issue, even though it was only one exam.

So the X-ray document was stamped "Hanford work." That's all it said on the document. And with no indication that the exam was performed offsite.

Now, I know that's been sort of a topic of discussion, and I know it's been determined also at the level of the statute that offsite exams are not included in the dose reconstructions.

But two things. One, this one seemed to be, at the time where we looked at it, seemed very straightforward, where it was stamped "Hanford work" and seemed that that would have qualified.

But there did result in a very interesting discussion, I thought, with ORAU people on the BRS. So NIOSH did say, well, all X-ray exams that were taken at Hanford in the early years, from 1944 to 1956, were performed offsite

at this Kadlec Hospital in Richland.

And the OTIB-79 describes which occupational medical exams were performed onsite or offsite, and therefore which exams should be included as part of the occupational medical dose assigns in the dose reconstruction.

What I thought was interesting is NIOSH said they went through the records, and it does appear that the records could have been labeled Hanford Works but those exams were actually performed at the hospital. And this I would like to hear a little more about.

Then later on in our exchange, NIOSH said that they actually have undergone some discussions with DOE to actually include Kadlec Hospital as a covered facility for these medical exams.

I guess the idea is that this is the only place that those occupational exposures that were a requirement for employment were being performed at a hospital, then you could argue that should be included.

Again, we understand that this was a decision made on the level of statute. But I'm just interested to hear more about this discussion. And I guess in the DR exchange, NIOSH indicated that if any of those changes do occur, about whether or not this hospital will be considered an onsite facility, then OTIB-79 will be updated.

So because of that, we recommended closing, but honestly I just wanted to hear more about the discussion because we had been, you know, talking about this similar issue about what x-ray exams are covered and offsite even though they were still requirements for employment. So yes, that --

CHAIRMAN KOTELCHUCK: Yes. Maybe someone on the line can tell us a little more about --

MR. HINNEFELD: This is Stu. I can offer some things on it. I can't offer much on this but I can offer some things on this.

CHAIRMAN KOTELCHUCK: Good, thank you.

MR. HINNEFELD: Yes, we received some

fairly definitive information from the Department of Energy that Kadlec Hospital is actually owned by the Department of Energy until September of 1956. They transferred the ownership to the City of Richland or some other entity in September of 1956. And so as a point, as a matter of fact, it turns out that x-rays taken at Kadlec Hospital up until September of 1956 were taken at a DOE facility.

So we have recently amended our OTIB-79 to reflect that. And we will, but that was just done so we will be engaging in a PER to evaluate the impact of that change on claims.

CHAIRMAN KOTELCHUCK: Very good. That's good, hard information. And I'm glad to hear it. So there will be a PER coming?

MR. HINNEFELD: Yes. Actually there were a couple of other sites where it changed as well. I don't remember which ones those are. But it will be essentially an OTIB-79 PER where we'll look at the impact of that OTIB-79 change.

CHAIRMAN KOTELCHUCK: Right. Well,

okay. That truly settles the matter. I don't think this is a finding. I think this is an observation. Right, okay.

MS. GOGLIOTTI: But this x-ray is now going to be included, it sounds like.

CHAIRMAN KOTELCHUCK: Yes.

MR. KATZ: Yes, it is, but it's because a facility is being added, not because anything was done incorrectly.

CHAIRMAN KOTELCHUCK: Right, that's correct. The rule was clear that they should not include those until -- and it's now changed, the rule. The facility is now part of our covered facility.

Where are we? I'm not sure. The next one, Hanford SRS RFP?

MS. GOGLIOTTI: That one is actually closed. We have gotten back to the SRS ones.

CHAIRMAN KOTELCHUCK: Oh, yes.

MS. GOGLIOTTI: Kathy, I know I recently sent you that email. Did you have a chance to look at that?

MS. BRIGGS: Excuse me, yes I did. I sent it to your CDC email.

CHAIRMAN KOTELCHUCK: Right, okay. So we have finished Hanford, yes?

MS. GOGLIOTTI: Yes.

MR. KATZ: Do you want to take a comfort break, perhaps?

CHAIRMAN KOTELCHUCK: Pardon?

MR. KATZ: Do you want to take a comfort break, perhaps?

CHAIRMAN KOTELCHUCK: Yes, I think this is a nice time to do it. That's my feeling. So folks, it's a little after 3:00. Let's get together at 3:15. And where will we be going? Which facility will be --

MS. GOGLIOTTI: Well, we'll just move right along here in the matrix if it's okay with everyone.

CHAIRMAN KOTELCHUCK: Sure.

**FERNALD, MOUND AND RFP**

MS. GOGLIOTTI: I believe the next one is Fernald and Mound and RFP.

CHAIRMAN KOTELCHUCK: Got it. Very good, thank you. See you at 3:15, folks. Thank you.

(Whereupon, the above-entitled matter went off the record at 3:04 p.m. and resumed at 3:16 p.m.)

MR. KATZ: So I think we can roll, Dave.

CHAIRMAN KOTELCHUCK: Yes, we can. Did we have one of the, what was it? Did we have one that we had left over this morning that we were going to go back to? It was --

MS. GOGLIOTTI: There is one SRS finding. I wasn't aware that NIOSH responded to it, because it came late last week.

CHAIRMAN KOTELCHUCK: Right.

MS. GOGLIOTTI: So we didn't have a chance to look at it. I pulled up the response, and it's fairly lengthy. So, if it's alright with you, I think we would prefer to wait to address that.

CHAIRMAN KOTELCHUCK: Absolutely. So, we're waiting on SRS 356?

MS. GOGLIOTTI: The number is --

MR. SIEBERT: Yes, 356.6, correct.

CHAIRMAN KOTELCHUCK: Okay, yes. Oh, sure. That's fine. We're going to meet again and hold them --

MR. SIEBERT: I'm sorry. And just to let you know, since we're still talking about the Savannah River --

CHAIRMAN KOTELCHUCK: Sure.

MR. SIEBERT: I did get that attachment for 382.2. It's uploaded in the BRS for Rose and Nicole. So that's all done.

CHAIRMAN KOTELCHUCK: Good. Good. Okay, folks. So, where do we go now?

MS. GOGLIOTTI: We're going to move on to the next matrix --

CHAIRMAN KOTELCHUCK: Okay.

MS. GOGLIOTTI: -- if that's alright with everyone.

CHAIRMAN KOTELCHUCK: Of course.

MS. GOGLIOTTI: So --

CHAIRMAN KOTELCHUCK: No. I don't

understand, there's a few that say Hanford SRS RFP.

MS. GOGLIOTTI: We did already cover those cases. Those particular cases just had multiple employment sites. So we have to pick a single --

CHAIRMAN KOTELCHUCK: A-ha. I see. Okay. Yes, okay. That's -- and we've taken care of those. So, we begin on now SRS 356.

MS. GOGLIOTTI: We actually have completed the SRS, except for that one that we just discussed, that we're going to come back to at the next meeting.

CHAIRMAN KOTELCHUCK: Right. Okay. I thought, I must have, my notes were off. I'm sorry.

MR. KATZ: So 373, pull that.

MEMBER CLAWSON: This is Fernald, right?

MS. GOGLIOTTI: Correct.

MEMBER CLAWSON: Okay.

MR. FARVER: Okay, this is Doug. Are we ready?

CHAIRMAN KOTELCHUCK: Yes.

MR. FARVER: Okay. To start 373, Observation 1, there was a date for one of the cancers that was different between two different DOL documents. So we wrote it up as an observation saying, gee, we're looking at this document, but this date doesn't match the dates that are in the DR report.

And, oh, okay. We have NIOSH's response down there. And it seems that there were a couple of different DOL reports that were updated, but that NOCTS did not update correctly. So, it did not update the, it did not include the correct dates for a couple of the cancers. It did not update them.

But as it turns out, it's not going to have a big impact on anything, because it's only going to be off by probably a couple of months. So there's no impact, no overall impact on the case. But it was just a problem where NOCTS did not update the dates correctly. So we wrote it up as an observation.

CHAIRMAN KOTELCHUCK: Okay. Alright.

MEMBER RICHARDSON: Is it, this is David Richardson. Is it an observation? I guess if it had been a couple of years instead of a couple of months, what would the consequences have been?

MR. FARVER: I don't know. But I would say if it would have had a significant impact on the case it would have been a finding.

MEMBER RICHARDSON: Yes. I mean, I thought of, I don't know. It seems to me like QA issues like that are better recorded as findings. Like, I'd like to understand the, you know, the etiology of that problem.

MEMBER CLAWSON: Doug, this Brad. This was with DOL, wasn't it? So NIOSH doesn't have any control over that or what? This is --

MR. FARVER: I don't completely understand who updates NOCTS, but when NOCTS was updated it did not include the correct dates.

MR. KATZ: I think we need to hear from Scott.

MR. SIEBERT: I can't answer to NOCTS

updates.

MR. KATZ: Oh, okay.

MR. SIEBERT: Sorry.

MEMBER CLAWSON: Stu.

CHAIRMAN KOTELCHUCK: So, Stu. Stu, are you on the line? We're getting some background here.

MR. KATZ: It sounds like someone's on the line that isn't needed, but should be. But, I gather we don't have Stu on the line, it seems like we need some follow-up to understand this.

CHAIRMAN KOTELCHUCK: Yes. Well --

MR. HINNEFELD: This is Stu. I just called in. Am I the one you're looking for?

MR. KATZ: Oh, yes.

CHAIRMAN KOTELCHUCK: Yes. Yes, indeed, it is. I was wondering, who updates NOCTS? Who handles it?

MR. HINNEFELD: That would be our communications folks downstairs, or what we call the claimant information communication team.

CHAIRMAN KOTELCHUCK: A-ha.

MR. HINNEFELD: What's the -- I'm just now catching --

MR. KATZ: So, there's a case, 373. It's the first observation. And the question is apparently NOCTS didn't update correctly. So the dates for a couple of the cancers of the claimant were off by a few months from what they should have been.

MR. HINNEFELD: Okay. I'll transfer this down there, and see what, see if we can figure out what happened.

CHAIRMAN KOTELCHUCK: Okay.

MR. KATZ: The question is whether this is a problem that could occur elsewhere, and understanding better how this occurred.

MR. HINNEFELD: I'll have to find out.

MR. KATZ: Yes.

MEMBER RICHARDSON: So, Ted, can I --

MR. KATZ: Yes, David.

MEMBER RICHARDSON: -- ask for a, maybe it's a misimpression of mine. I thought that the dates were close because the diagnoses for multiple

cases were close in time. It wasn't that there was a typo. Is that correct?

MR. KATZ: Yes, I -- Doug.

MR. FARVER: Okay. It looks like the new August 2003 cancer replaced the June cancer, rather than the November cancers.

MEMBER RICHARDSON: Right. But the, just the timing of the dates, the problem of transposition of dates is because there are multiple claims, there are multiple cancers going through.

MR. FARVER: Yes. There have been --

MEMBER RICHARDSON: That was my perception. So, you know, here it happens to be that somebody's cancer diagnoses were close in time. And you would have another case where they could have been further in time.

MR. FARVER: Yes.

MEMBER RICHARDSON: And it would be especially the kind of a problem where you have non-fatal cancers. So, yes, I guess, I mean, just that there's a difference between a problem of a

typo, and there's one type of QA. But then if there's something happening with transpositions of dates for multiple diagnoses, then that's a different type of problem. And I don't think, I would really feel like that's a finding.

MR. KATZ: Right. And so, all I was saying, David, is I thought it would be helpful to hear from DCAS once they figure out what exactly happened in this case.

MEMBER RICHARDSON: Right.

MR. KATZ: Because I don't think Doug knows why the error was made.

MEMBER RICHARDSON: Yes, yes. Okay. I just was wondering about the rationale of it, you know, of being a couple of days or a couple of months off --

MR. KATZ: Yes.

MEMBER RICHARDSON: -- versus there being a couple --

CHAIRMAN KOTELCHUCK: Yes.

MEMBER RICHARDSON: -- of diagnoses, where the dates of diagnoses have been transposed.

CHAIRMAN KOTELCHUCK: Why don't we just consider this in progress until we can get some clarification? I think it's probably a finding. But that's, but we, I mean, Stu will try to get it clarified.

MR. HINNEFELD: Yes, can someone tell me which set this case is from, so it will help me track down the tracking number that I'm going to need.

MR. SIEBERT: Stu, I sent that information to you in an email. You have it.

MR. HINNEFELD: I've got the tracking number?

MR. SIEBERT: Yes.

MR. HINNEFELD: Okay, thanks.

MR. SIEBERT: Sure thing.

CHAIRMAN KOTELCHUCK: Okay. Alright. So --

MR. FARVER: Observation 2. When we're looking over the spreadsheet for the recycled uranium dose comparisons, we saw where the total from the scan in the adrenals totaled greater than

one millirem, [i.e.] two millirem each. And the DR states that they were omitted, since they contributed less than a millirem per year, in any year.

As it turns out, that is correct. It was, although the total dose was two millirem, the dose for a year was less than a millirem. So, in other words, the total dose was over multiple years.

So they've got a dose, the DR report was correct. It was just a little confusing, because when we reviewed the spreadsheet we saw the two millirem, and --

CHAIRMAN KOTELCHUCK: Right.

MR. FARVER: -- got confused. But we wrote it up as an observation, just because we didn't understand.

CHAIRMAN KOTELCHUCK: Right. And it's clear now, and that's reasonable. So, it seems to me where the observation is, so we can close. Okay?

MR. FARVER: Okay.

CHAIRMAN KOTELCHUCK: Alright, folks, let's go on, 373.1.

MR. FARVER: 373.1, let's see. The finding was that the incorrect energy distributions were applied. Incorrect meaning -- I thought I knew that one. Okay. This is where the DR report lists energy distributions were split into two different energy groups.

CHAIRMAN KOTELCHUCK: Right.

MR. FARVER: Like, I think the 60/40. Forty percent starting at 250 keV, and 60 percent greater than 250 keV. Now, those are what's written up in the DR report. However, according to OTIB 17, when you do the -- follow OTIB 17, you apply the missed dose to the skin as 100 percent starting at 250 keV.

CHAIRMAN KOTELCHUCK: Okay.

MR. FARVER: So it appeared that they did not use the correct energy distributions, because they didn't use the ones that were in the DR report. They followed OTIB 17, which was correct. So you could say it was a little bit --

they probably should have put something in the DR report, stating what they were doing. But --

CHAIRMAN KOTELCHUCK: Okay.

MR. FARVER: Overall the calculations were correct.

CHAIRMAN KOTELCHUCK: They were, right. So, this is an observation that we should close, right?

MR. FARVER: Well, this was written up as a finding, because it's different than what was written in the DR report.

MR. KATZ: Alright. That's understood, Doug. But it's still -- there's no consequence. It's an observation. There's no error in the dose reconstruction.

MR. FARVER: No, that's correct.

MR. KATZ: Yes.

CHAIRMAN KOTELCHUCK: Right.

MR. KATZ: That's good.

CHAIRMAN KOTELCHUCK: Okay. So close, we'll close on the observation.

MR. FARVER: Yes.

CHAIRMAN KOTELCHUCK: Okay. Point 2.

MR. FARVER: Finding number 2. Incorrect dose conversion factors were applied to cancers number nine, ten and 15. This goes back to a difference between what is written in the DR report, and what was actually done.

So the, it is correct that they did not use the dose conversion factors written in the DR report for those cancers. That is because what they did, NIOSH did, they used the Monte Carlo analysis. And when they used the Monte Carlo analysis, instead of using the, I think it's the mean values, they used a distribution, and did the Monte Carlo calculations. So, what they did was correct. But what was in the dose -- DR report -- was not what they did.

CHAIRMAN KOTELCHUCK: And why do you suppose it was not what they did?

MR. FARVER: Well, because they put the dose conversion factors that were just done like a point calculation. But they did the Monte Carlo calculation, which uses a distribution.

CHAIRMAN KOTELCHUCK: Right.

MR. FARVER: Which is going to give you a different dose conversion factor.

CHAIRMAN KOTELCHUCK: So, right. And they didn't write up that it was Monte Carlo.

MR. FARVER: And they -- it's different than what they put in their ---

(Telephonic interference)

CHAIRMAN KOTELCHUCK: Okay.

MR. FARVER: It's kind of a subtlety.

CHAIRMAN KOTELCHUCK: Yes. And it's an observation too.

MR. FARVER: What's written up as a finding, we can change it to an observation.

CHAIRMAN KOTELCHUCK: Yes. It should be.

MR. FARVER: Okay.

CHAIRMAN KOTELCHUCK: Okay, folks, I think we should close this. Alright. [PAUSE] Closed. And 373.3.

MR. FARVER: 373.3. An incorrect table is used for the 1993 X-ray dose. NIOSH

agrees with this finding --

CHAIRMAN KOTELCHUCK: Hello. Doug?

MR. FARVER: Yes.

CHAIRMAN KOTELCHUCK: Okay. Go ahead.

MR. FARVER: Okay. Incorrect X-ray dose for 1993. And it has to do with the dates. The dose was applicable through April. But the dose changed and then from May through December there was a different dose value used.

What the DR should, the dose reconstructor should have used the lower dose in this case, instead of using the higher dose. So, it was an error on the part of the dose reconstructor. Very small dose error.

CHAIRMAN KOTELCHUCK: Handed over a high -- claimant-favorable higher dose?

MR. FARVER: Right.

CHAIRMAN KOTELCHUCK: Right. Okay. Well, this is okay, clear cut. And this is an observation. Excuse me, pardon me. This is a finding. Because there was an error, a procedural

error. Although I can understand that the person would do this, saying, well, why bother? I'll just take the larger of the two.

It's a reasonable -- they did it in a reasonable, claimant-favorable way. But technically speaking, they did not do it correctly. They could have done it more accurately, which would have -- so I would say that we can close it. And we would close it as a finding. Would others agree?

MEMBER MUNN: Yes.

MEMBER CLAWSON: This is Brad. I'd agree.

CHAIRMAN KOTELCHUCK: Okay.

MEMBER BEACH: I do too.

CHAIRMAN KOTELCHUCK: Okay. Alright, then, we're agreed. Closed.

MR. FARVER: Okay. And then we move on to Tab 374, Observation 1. The observation is that it's not clear from the DR report why NIOSH did not extend the uranium chronic intake regime through the end of 1963. Instead they ended it in

September of 1963, I believe, which was based on the submittal of the last urine sample.

NIOSH's response is, the intake regime was based on the submittal of the last urine sample. And this is the final sample during the uranium period. The TB states to assume uranium, natural uranium prior to 1964.

We wrote it up as an observation, just because we did not really understand. It really does not have an impact on the dose.

CHAIRMAN KOTELCHUCK: I mean, when did the person stop work? It wasn't clear on the --

MR. FARVER: Well, you're only going to do this regime through the end of 1964 -- I mean, through the end of 1963. So instead of carrying it to 12/31/1963, I believe NIOSH carried it just to the last sample date.

CHAIRMAN KOTELCHUCK: Yes.

MR. FARVER: The intake ending on the sample date of 9/6/1963.

CHAIRMAN KOTELCHUCK: Right. That looks more like a finding. Again, I can see a

person may have just estimated that if it was -- that it was non-compensable. But on the other hand, it is -- I mean, they should have completed it until 12/31.

MR. SIEBERT: Well, this is Scott. Let me make a clarification here.

CHAIRMAN KOTELCHUCK: Good.

MR. SIEBERT: That's the first intake regime. There are additional intake regimes that are signed after that. There's another one from 9/7/63 through 1976.

It's not that we didn't assign uranium after that. It's just that each regime was handled separately. So we didn't take the regime that was just a little bit at the end of 1963 and call that natural uranium, and then call the rest recycled uranium.

CHAIRMAN KOTELCHUCK: Right.

MR. SIEBERT: We called it all the way recycled uranium for those extra three months to be claimant-favorable.

CHAIRMAN KOTELCHUCK: Okay. And you

had, this is 374. I thought the person may have ended employment at the end of '64. You're saying the employment went on?

MR. SIEBERT: Yes, through '76. Correct.

CHAIRMAN KOTELCHUCK: Okay. Well then, in which case what you say is correct, and this just becomes an observation.

MR. FARVER: Right. That's why we wrote it up that way.

CHAIRMAN KOTELCHUCK: That's right. Okay, folks, we'll close it. Good. Okay.

MR. FARVER: Let's see. First finding, 374.1, failure to address missed thorium intakes. The employee had some test count results in the DOE record.

NIOSH agreed that they should have assigned a missed thorium intake. The thorium results were not included in the bioassay spreadsheet, which is the primary source employed by the dose reconstructor.

The dose reconstructor should have

reviewed the duplicate pages to ensure no additional information. So it's on the dose reconstructor's part. And it's resulting in about 76 millirems, which has no overall impact on the claim.

CHAIRMAN KOTELCHUCK: Very good. And NIOSH acknowledged that that was just an error?

MR. FARVER: Yes.

CHAIRMAN KOTELCHUCK: Okay. So, that's clear cut to be closed, and as a finding. Okay.

MR. FARVER: Yes.

CHAIRMAN KOTELCHUCK: Let's go on.

MR. FARVER: Okay, 374. 2. There's a failure to sufficiently address incidents.

CHAIRMAN KOTELCHUCK: Misspelled, by the way.

MR. FARVER: Yes, it is.

CHAIRMAN KOTELCHUCK: Okay. It will be corrected, I'm sure. Please. Okay.

MR. FARVER: Okay. In the CATI report the claimants indicate that they have copies of

urine bioassay results, in vivo monitoring, X-ray exams, and so forth. And that this documentation --

SC&A reviewed the files and found no record of the documentation being provided to NIOSH. Even though for most years the records appear to be complete, SC&A finds it relevant that all files be included.

It looks like the employee was involved in about four different incidents. And, even if the employee did have the information, and didn't provide it to NIOSH, the records were complete enough that it would not have impacted the overall dose assessment.

Although NIOSH agrees that the DR report is lacking details concerning the incidents, it's not going to change it, or have an overall impact on it.

CHAIRMAN KOTELCHUCK: Right.

MR. FARVER: So, this is just another case where they, you know, they could have more information from the CATI report and the DR report.

CHAIRMAN KOTELCHUCK: Right. So this becomes an observation, does it not? And we lack -- well, we lack the information. So we can't go beyond it. So it seems to me it should be closed, but closed as an observation, should it not? Board Members?

MEMBER MUNN: Well, closed, yes.

MS. BEHLING: This is Kathy Behling. Again, can I just have a question? Did I understand the CATI report to say that they, that the individual actually had records? When that's the case, how much does NIOSH pursue, how far do you go to pursue getting those records? Or am I misunderstanding what the CATI stated?

MR. SIEBERT: Well, we always ask them to send in any records that they may have. What was interesting on this one is, if you look further in the CATI, they also stated they didn't know. It shows the option of don't know when they were talking about post-incident monitoring.

As well as they said, biological monitoring after an incident was the normal

procedure. However, they do not know if the EE participated in biological monitoring after the incident he was involved in. I'll have to look back. Give me a second here real quick. I'm thinking this is with a survivor.

CHAIRMAN KOTELCHUCK: Yes.

MR. SIEBERT: So they're really, as I said, if they say they have records, we ask them to go ahead and send anything that they have. But that's about as far as we can go.

CHAIRMAN KOTELCHUCK: While you're looking at that. You know, I would find in all CATI reports, to my mind it would be much clearer if every report was CATI (claimant) or CATI (survivor). That plays a very important role in my mind.

MR. SIEBERT: Well, when I say, when SC&A has an observation or a finding related to a CATI, that would be easy for them to --

CHAIRMAN KOTELCHUCK: Yes.

MR. SIEBERT: -- notate that.

CHAIRMAN KOTELCHUCK: Yes. You know,

folks, why don't you, I would think that would be useful to me, and maybe to other Board Members as well. Because the quality of information is really very different.

MR. SIEBERT: Well, the CATI itself, you can tell when you look at the CATI whether it's a survivor or the EE. I just had to look at the CATI.

CHAIRMAN KOTELCHUCK: No, right. No, Scott, you do. You have that, of course. The problem is, those of us on the Subcommittee don't have it. So I would not know reading this --

MR. KATZ: Right.

CHAIRMAN KOTELCHUCK: Did not know.

MR. SIEBERT: Got you. That is, I didn't understand what you were saying.

MR. KATZ: Right. That's what I was saying. SC&A can just note it.

CHAIRMAN KOTELCHUCK: Could you do that, SC&A folks?

MS. GOGLIOTTI: Absolutely. We don't have any current dose reconstructions in the

blinds. But whenever we get our next batch we'll implement that.

CHAIRMAN KOTELCHUCK: Yes, that's good. Right. Good.

MR. SIEBERT: And for clarification, it definitely was a survivor.

CHAIRMAN KOTELCHUCK: A survivor?

MR. SIEBERT: Yes.

CHAIRMAN KOTELCHUCK: Okay.

MS. GOGLIOTTI: Now, for my clarification though, I'm getting the impression that now the Board would not like us to indicate this is a finding when an incident is mentioned, but not mentioned in the actual report. Because it can't be reconstructed. Is that --

CHAIRMAN KOTELCHUCK: Yes.

MS. GOGLIOTTI: -- consistent with what you're feeling?

CHAIRMAN KOTELCHUCK: I feel that way. How about others?

MEMBER MUNN: Yes. I agree that seems like it should be a -- not a finding.

MS. GOGLIOTTI: Because this is different than what, past instructions we've received. So I just want to clarify that going forward.

CHAIRMAN KOTELCHUCK: Yes. I will say that at least for me, it wasn't until I began participating in the writing of the Secretary's report that I realized the importance of this. And so, I, as Chair I was not paying attention. I was not paying attention to this, because I didn't understand the importance of it. And now I do.

And that's why you'll notice I'm fussing around a lot about findings and observations. Whereas before I rarely participated in any conversations about that. Usually other Board Members, Subcommittee Members, made suggestions. And, you know, I listened, and went along, or didn't go along.

So, yes, I think that's, you're right. This may be effectively a different practice. And that significantly comes, at least from me, from the report that we're doing.

MS. GOGLIOTTI: Okay. So from now on anything where we find we don't believe that the dose reconstruction report itself did adequately address something, but the actual dose reconstruction was appropriate, from now on that will be an observation?

CHAIRMAN KOTELCHUCK: Yes, yes.

MS. GOGLIOTTI: And keep in mind that that won't affect everything that's already done. It will start from --

CHAIRMAN KOTELCHUCK: That's correct.

MS. GOGLIOTTI: Okay.

CHAIRMAN KOTELCHUCK: And, you know, but in fact, many other things, including the things that we're going to come into, the suggestions that are going to made on Methods, suggestions that are going to be made on how we might approach more expedited dose reconstruction, these will all be in the [Secretary's] Report. And it will be soon.

So, we're, you know, we're turning -- It's an appropriate time to turn new leaves, if new

leaves are worthy of turning. Okay. Let us go on.

MR. FARVER: Okay. Next one will be Tab 375, Observation 1. SC&A found conflicting information for a photon dosimeter, limit of detection values between two tables. In the TBD Table 6.3 and Table 6.13, one listed as 30 millirem, one listed as 20 millirem for the same period, which can get confusing.

So the NIOSH response is, the LOD value of 20 is built into the Fernald workbook. And NIOSH agrees there is conflicting information. NIOSH determined that 20 was the more appropriate value between the two, and used that in the Fernald assessments.

The bottom line is the TBD has been revised to correct the conflict. And in this case those tables do not conflict anymore.

CHAIRMAN KOTELCHUCK: Okay. So it's an appropriate observation. And I think we can close it.

MEMBER MUNN: Agreed.

CHAIRMAN KOTELCHUCK: Okay, 375.1.

MR. FARVER: 375.1. There's an inconsistency in the distributions and doses in the electronic IREP table and the IREP table that's attached to the DR report.

Just to clarify this, every DR report, at the very end has an IREP table printed with it. Along with that there's an electronic spreadsheet of an IREP table that goes along with the file. In this case those two files -- or the numbers in those two files did not match up. And that's the basis for the finding.

And the NIOSH response is, the original IREP sheet was not the final IREP sheet used for the PoC determination. And if you would look at the DR report, the IREP tables in there, they were not done using a Vose or Monte Carlo-type calculation. They were done using just a single point calculation.

And since this claim was over 45 percent, they should have used a Monte Carlo one. So it was reworked. However, the new file did not replace the attachment to the dose reconstruction

report. Somehow this step was overlooked in the process. And it was kind of like a NIOSH process error.

The doses are correct. There's a difference in what was in the dose reconstruction report to what was finally the final doses.

CHAIRMAN KOTELCHUCK: So, it's a reporting, it's a -- is it a process error?

MR. FARVER: I believe it was an error in the way NIOSH handled the process of updating their file.

CHAIRMAN KOTELCHUCK: Yes.

MR. KATZ: I mean, I guess you might want to ask, were the doses sent to DOL correct?

MR. SIEBERT: They were. I would agree. What happened is, as you well know, the DCAS reviews the ORAU Team's dose reconstruction reports. In this case the DCAS reviewer had a comment, and wanted something else changed in it.

Our normal process is for it to come back, and we resubmit it. And when we do the re-submittal is when the IREP sheet gets merged

into the report. However, in this case the DCAS reviewer obtained the files directly, instead of returning it. And just missed the step of re-merging that into the DR process.

So, it's an unusual process that the reviewer used. And we normally don't do it that way. So, our normal process catches it all. It's fine. It's just this walked out slightly outside the process.

CHAIRMAN KOTELCHUCK: But there was no error. I mean, I don't see that there was an error in what NIOSH did.

MR. FARVER: Right. The actual calculations were all correct. It's just the wrong copy of the IREP sheet was appended to the dose reconstruction --

CHAIRMAN KOTELCHUCK: Yes.

MR. FARVER: -- report for the claim.

CHAIRMAN KOTELCHUCK: Yes. Sounds like a closure and observation. If we close it, it's an observation, is it not? Board Members?

MEMBER MUNN: I don't see why not.

CHAIRMAN KOTELCHUCK: Pardon? Pardon? I missed --

MEMBER MUNN: Sorry about that. I don't see why not.

CHAIRMAN KOTELCHUCK: Yes.

MEMBER BEACH: Yes. I agree with that.

CHAIRMAN KOTELCHUCK: Yes. Okay. Let's close it with, as an observation. The other one, go to 375.2.

MR. FARVER: 375.2. NIOSH may have used an LOD value instead of an LOD over two for the missed 30 to 250 keV photons. This is the same as we've talked about before, that the attachment to the dose reconstruction report is not the final run. So it was confusing for us to determine how they came up with the values for their doses when the files didn't match.

CHAIRMAN KOTELCHUCK: So they should have used the LOD over two, right?

MR. FARVER: Well, I believe they did it correctly. The problem was, when we're

reviewing it, it's confusing because the files, what they say they do, and then what the final file is, are different.

CHAIRMAN KOTELCHUCK: Yes.

MR. FARVER: So that's why we have it stated this way, may have used an LOD value instead. It's because we really can't tell what they did, because the files don't match.

MR. KATZ: So, Doug, this is wrapped up in that other business, in effect?

MR. FARVER: Yes. And I believe a lot of these are all wrapped up together.

MR. KATZ: Okay.

CHAIRMAN KOTELCHUCK: So, it's an observation, yes?

MR. FARVER: Yes.

MEMBER MUNN: Yes.

CHAIRMAN KOTELCHUCK: Okay. Let's -- this is an observation. We can close it now. And that's good.

MR. FARVER: Okay. Moving on to number 3.

CHAIRMAN KOTELCHUCK: Point 3, right.

MR. FARVER: The neutron doses appear incorrect. As with 375.2, the values hand entered by the DR into the Vose simulation tool were incorrect for an N/P ratio. That's been corrected in the tool.

So in the previous one there was an error, but it was corrected in the revision to the workbook.

CHAIRMAN KOTELCHUCK: And for this one?

MR. SIEBERT: Well, let me clarify. This is Scott. The difference is, when this claim was assessed, the Vose runs were actually done outside the normal tool. They had to be done separately. And additional information had to be entered into is on a site by site basis by the DR.

They made the mistake on how they did that in this case. The correction to the tool is that the Vose calculations are now rolled into the main tool. So the DR doesn't have to make this, the entry of the N/P ratio or other parameters like

that anymore. So the process has been fixed. The dose reconstructor made an error in this case.

CHAIRMAN KOTELCHUCK: Right. Okay. So this is a finding. And it is now corrected. The process has been corrected.

MR. SIEBERT: Yes.

CHAIRMAN KOTELCHUCK: Okay. So, that's good. That's a finding. And I move for closure. Any concerns?

MEMBER MUNN: No.

CHAIRMAN KOTELCHUCK: Okay.

MR. FARVER: Okay. Next --

CHAIRMAN KOTELCHUCK: 375.4.

MR. FARVER: -- is 375.4. This concerns the ambient dose. NIOSH failed to multiply the ambient dose by 2,500 hours per year. This is just to compensate for the doses that are listed in the TBD. Then we do this calculation. NIOSH agrees that they did not multiply their ambient dose by the 2,500 hours per year.

It's a DR, dose reconstructor error. And it decreased the dose. SC&A questions if the

DR was reworked with the new values. But I'm thinking this was a compensated case. So I'm not sure you would rework it.

MR. SIEBERT: That is correct, Doug.

MR. FARVER: Okay.

CHAIRMAN KOTELCHUCK: Okay. So the resolution here is that, I mean, this was an error. So it is a finding.

MR. FARVER: Yes. It just, it was a compensated case, so there's no need to rework it.

CHAIRMAN KOTELCHUCK: Right, right. But in terms of our review, it's a finding, and should be closed, folks, right? Okay.

MR. FARVER: Okay, 375.5. There's duplicate ambient doses for 1985 through 1997. They're in there twice. NIOSH says there appears to be a cut and paste error and it's been corrected, because the ambient doses no longer require the use of a separate spreadsheet. An error within the external dosimetry tool. So it was, you know, another dose reconstructor error. Once again, the case is already compensated.

CHAIRMAN KOTELCHUCK: Very good. Okay. So we'll --

MR. KATZ: Also, another error that is fixed for other cases. Because the tool's corrected, right?

CHAIRMAN KOTELCHUCK: Correct.

MR. KATZ: Okay.

CHAIRMAN KOTELCHUCK: Okay. So let's close that as a finding. Good.

MR. FARVER: Next one's easy, 412. No findings.

CHAIRMAN KOTELCHUCK: Right. Okay. Any observations?

MR. FARVER: No. Then we'll move on to 413.

CHAIRMAN KOTELCHUCK: Okay.

MR. FARVER: Observation 1. SC&A found that NIOSH assigned a missed photon and missed neutron [dose], as if the EE was monitored on a monthly basis in '84, and quarterly during '85 to '94, for a total of 52 zeros. Assigning missed dose when the EE was not badged is technically

incorrectbecause the employee was not wearing a badge to register a dose.

NIOSH's response was, the site did not provide any dosimeter records for '84 through '90. And there's no indication that the employee should have been monitored during the time.

Oh, okay, I remember this one. This, it was a [identifying information redacted]. And he was there over a period of, I think then, years intermittently, you know, repairing machines. Therefore, NIOSH agrees that only unmonitored dose would have been more appropriate.

And the assessment that was submitted by NIOSH included a missed dose and onsite ambient dose. And the total of those two doses was an overestimate in the EE's dose.

Now, we looked at that. And we agreed that while they used the missed and ambient doses as an overestimate, it was just, it is not technically correct to assign a missed dose.

CHAIRMAN KOTELCHUCK: Yes.

MR. FARVER: But, you know, it's not

going to have any impact on it [PoC].

CHAIRMAN KOTELCHUCK: Right. So this is an observation, as you say. Sure. Okay. Let's close it, folks.

MEMBER MUNN: Yes.

CHAIRMAN KOTELCHUCK: Okay, 413.1

MR. FARVER: Okay. Pre-employment X-ray exam was not assigned. Once again, this is the [identifying information redacted] guy over a period of ten years. And what NIOSH did is, they did assign an X-ray exam dose every year for that ten years. But they just did not assign a pre-employment exam, as is stated in the Technical Basis Document.

CHAIRMAN KOTELCHUCK: But they need not have, need they, for a person who comes in sporadically?

MR. FARVER: Well, it depends. I don't believe that's clear in the Technical Basis Document. Okay. This is a special case, you know, he's a [identifying information redacted] guy. I understand what they did. But according

to the technical basis they probably should have.

CHAIRMAN KOTELCHUCK: But if he --

MR. FARVER: But there were no records. I mean, there were no diagnostic records for this employee, as would be expected. And in the CATI report the employee indicated that medical X-rays were not required as a condition of employment. So in my opinion, it's kind of a judgment call. And you're talking about one X-ray exam.

CHAIRMAN KOTELCHUCK: Right, we are. But there's perfectly good reason to think that they may never have given him a pre-employment X-ray exam.

MR. FARVER: They may not have given him any X-ray exams. There were no records.

CHAIRMAN KOTELCHUCK: Wait a minute. I thought you said that they --

MR. FARVER: No. I said NIOSH assumed that they did -- and they assigned a dose every year for the ten years.

CHAIRMAN KOTELCHUCK: Yes. I see what you're saying. Well, that's reasonable.

MR. FARVER: That's reasonable and claimant --

CHAIRMANKOTELCHUCK: Claimant-favorable.

MR. FARVER: -- favorable.

CHAIRMAN KOTELCHUCK: You're right. There may not have been any.

MR. SIEBERT: But just --

CHAIRMAN KOTELCHUCK: But then --

MR. SIEBERT: Just for clarification there, the site did mark the DOE response as saying there were no X-ray records for this employee.

MR. FARVER: Right.

MR. SIEBERT: So, realistically, I believe the DR was trying to do just an overestimate, save some time, and put an X-ray every year rather than looking through the records.

But when you look at the specific records, there were no X-rays at the site. So the best way to do this actually is not to assign any X-rays. So we definitely did an overestimate in this case.

CHAIRMAN KOTELCHUCK: Yes. This appears to be an observation. Nothing was done wrong.

MS. GOGLIOTTI: No. It's an overestimate in the best estimate case. But we could argue either way for that.

CHAIRMAN KOTELCHUCK: Yes, yes. Let's close this as an observation.

MR. SIEBERT: Just a clarification. It's not a best estimate case.

MS. GOGLIOTTI: The PoC is 43 percent.

MR. SIEBERT: Yes. That's not a best estimate. Forty-five to 52 percent is a best estimate case.

MS. GOGLIOTTI: Ah, got you.

CHAIRMAN KOTELCHUCK: Okay. Closed?

MEMBER MUNN: Yes.

CHAIRMAN KOTELCHUCK: Okay.

MR. FARVER: Okay. Next one is 420, I believe.

CHAIRMAN KOTELCHUCK: 420.1, yes.

MR. FARVER: Okay. Fernald. Yes.

The 1994 assigned dose does not appear to be technically reasonable. And let me try and give you some more information on that.

Okay. The reason for this, and if you look at the doses for previous years in 1992, they were running about 160 millirem. And then in 1994 it turned out to be 15 millirem.

And we kind of looked at that and said, gee, that just doesn't look right. And when NIOSH looked at it they, NIOSH, agrees that the '94 doses are incorrect. They say they're too high.

CHAIRMAN KOTELCHUCK: Wait a minute. The 15 is too high? Or the 400?

MR. FARVER: And it looks like they say the 15 is too high.

CHAIRMAN KOTELCHUCK: Yes. Okay. That's what I thought I heard you say. 1992 was, what did you say? Not 400, 100?

MR. FARVER: 160.

CHAIRMAN KOTELCHUCK: 160. And then it went down to 15?

MR. FARVER: Yes.

CHAIRMAN KOTELCHUCK: And they're saying 15 is too high?

MR. FARVER: Well, let's read their response. Further investigation of the claim filed determined that the measured doses for '92 and '94 for the lung cancer runs for this claim were incorrect.

The lung doses were run through a Vose assessment tool. But it appears a cut and paste error occurred with the measured dose. The dose values are correct in the Vose tool output, but not in the IREP sheet.

So it looks like we had a little bit of an error when we went from the workbook and then pasted it into the IREP sheet. The original dose reconstructor is no longer available. And NIOSH is unable to replicate the error.

MR. SIEBERT: And the continuation of that is that the present tool now has Vose in it. And there's no reason for the dose reconstructor to cut and paste anymore.

CHAIRMAN KOTELCHUCK: Right. But

this was an error in the first place.

MR. SIEBERT: Agreed.

CHAIRMAN KOTELCHUCK: Yes. Okay. So it's a finding. And it should be closed.

MEMBER MUNN: Yes.

CHAIRMAN KOTELCHUCK: Okay. We will go on then.

MR. FARVER: Okay.

CHAIRMAN KOTELCHUCK: Fernald and Mound.

MR. FARVER: Tab number 425. Okay. It looks like there's no observations. So we jump into the findings, 425.1. The Mound records for the employee show a gap in the badge exchange during 1984, February to March, and also during July through August of '94.

NIOSH did not assign gap, missed, or environmental dose for these periods. NIOSH agrees that the gaps were not addressed. To address the deficiency the short term gaps were filled by the adjacent dosimetry averages, in accordance with IG-001.

As a result, a number of zero dosimeter [doses] increased by one for both photons and neutrons. An additional 20 millirem of photon dose and 41 millirem of neutron dose was assigned for each dose.

Well, this change, and that in the findings of two, three and four, the combined PoC remained below 45 percent.

CHAIRMAN KOTELCHUCK: Now, let me ask you, there are badge exchanges from February 8th to March 11th? What were they doing on a weekly basis? That's a one month period.

MR. FARVER: Yes. Well, there were -- I don't have that in front of me. Let me see if I can find it real quick.

CHAIRMAN KOTELCHUCK: Okay. It almost has to be. Exchange periods had to be less than a month.

MR. SIEBERT: Yes, but those periods are approximately a month. I believe it was monthly --

MR. FARVER: Yes.

MR. SIEBERT: -- monitoring.

CHAIRMAN KOTELCHUCK: Yes.

MR. FARVER: Okay.

CHAIRMAN KOTELCHUCK: But it's a gap? I don't understand. It's a gap between two monthly readings.

MR. SIEBERT: We didn't have a dosimeter for that time, for those gaps. But it appears that it would be a timeframe that would be covered by one dosimeter. We just do not have any record of a dosimeter being issued during that timeframe.

CHAIRMAN KOTELCHUCK: So maybe it's that the badge exchanges are not available. The badge measurements are not available for February 8th and for March 11th. For two months.

MR. SIEBERT: No. For the period between February 8th and March 11th, that month. There is no badge for this individual during that timeframe.

CHAIRMAN KOTELCHUCK: Ah, okay.

MEMBER MUNN: As you look at the next

gap, that one is a two week gap, it appears. So --

MR. FARVER: So the question becomes, how do you handle this gap?

MEMBER MUNN: Yes.

CHAIRMAN KOTELCHUCK: So I see what it is. There was a declaration that the person [was] badged up to February 8th. And they changed, perhaps they changed companies? Or did they just --

MR. FARVER: Well, the thing is, how do you handle this gap? Do you do a missed dose, do you do --

CHAIRMAN KOTELCHUCK: Okay.

MR. FARVER: -- unmonitored dose? And --

CHAIRMAN KOTELCHUCK: Alright. I see --

MR. FARVER: I believe we have seen this done different ways. And I think a lot of it depends on the size of the gap. If I'm --

MR. SIEBERT: That's correct, Doug.

If it's a short term gap what we'll do is, we'll fill it with adjacent dosimetry. Say an average of the two dosimeters on either side.

CHAIRMAN KOTELCHUCK: Right.

MR. SIEBERT: And we consider a short term gap approximately a quarter. Once you're beyond that we'll be looking at co-worker dose if it's available for the site.

MR. FARVER: There is a provision in IG-001 that allows you to fill in a gap using adjacent dosimetry results.

CHAIRMAN KOTELCHUCK: Yes.

MR. FARVER: Okay. This type of finding we have, we'll see probably again. Because a lot of it is a judgment call on the part of the dose reconstructor and the size of the gap.

Now this is a relatively small gap in these two periods. But I know we have questioned this before where, well, "Why did you do unmonitored dose, or co-worker dose, or something, when there's larger gaps?" Just keep this in mind. This does come up from time to time, this issue of

the gap.

MEMBER MUNN: In early days we discussed this interminably. For weeks this was kicked around, and discussed over, and over, and over again. And I think, as has been stated here, the approaches that we're going to be taking are pretty well solidified.

CHAIRMAN KOTELCHUCK: Yes. But it looks like, let's see now, NIOSH did not assign the gap.

MR. SIEBERT: Correct. That's the --

CHAIRMAN KOTELCHUCK: Okay. So nothing was assigned. The argument was nothing was assigned in that period. And there are standard protocols for that.

MR. SIEBERT: We agree that there was an error, because we did not assign something.

CHAIRMAN KOTELCHUCK: Okay. Right. Alright. Understood. That's good. Okay. So we certainly will move to close it. And it is certainly a finding. Okay. Thanks, folks.

MR. FARVER: Okay. Next one is 425.2.

NIOSH used the incorrect surrogate organ for the lung. They used a female lung instead of a male lung, or a male lung instead of a female lung. That's what it was, wrong gender.

CHAIRMAN KOTELCHUCK: Right.

MR. FARVER: They've revised their Fernald tool. And it assigns the higher value, a female lung, for all.

CHAIRMAN KOTELCHUCK: Right. Now, was there any reason to go back to other previous females? Or, someone check, but in general have we been doing this correctly and then this was just an isolated error?

MR. SIEBERT: I can't speak to that at the moment. I'm digging into the case. Sorry about that.

CHAIRMAN KOTELCHUCK: Okay. And that's good. No, no, that's fine.

MEMBER MUNN: It is hard to believe that a difference of four millirem is of any consequence, even though --

CHAIRMAN KOTELCHUCK: Of course.

That I grant you. But mis-assigning the organ, which is really mis-assigning the gender --

MEMBER MUNN: Yes.

CHAIRMAN KOTELCHUCK: -- is, that's a serious mistake.

MEMBER MUNN: It is. It might possibly be in the case of other organs too.

CHAIRMAN KOTELCHUCK: Yes.

MEMBER MUNN: Particular case.

CHAIRMAN KOTELCHUCK: Yes.

MR. SIEBERT: Well, it, what it looks like in this case is, it's not a lung cancer. It's a different type of [identifying information redacted] cancer where we're using lung as the surrogate.

CHAIRMAN KOTELCHUCK: Ah-ha.

MR. SIEBERT: And when the dose reconstructor used the surrogate value, they pulled the male as opposed to the female value off of there. I'm guessing they didn't choose male on purpose. They just picked the wrong one, which is why our tool now defaults to the higher of the two

--

CHAIRMAN KOTELCHUCK: Very good.

MR. SIEBERT: -- for a surrogate organ.

CHAIRMAN KOTELCHUCK: Okay. Very good.

MEMBER MUNN: In which case you would, could still, and probably would have the kind of error we're looking at right here, as a blessed event.

CHAIRMAN KOTELCHUCK: Right.

MEMBER MUNN: It's the higher of the two.

CHAIRMAN KOTELCHUCK: That's correct.

MEMBER MUNN: And that's something, gender appropriate or notwithstanding.

CHAIRMAN KOTELCHUCK: Yes. So this does not appear to be an error. This appears to be -- because this was not the organ in question, but was a surrogate organ, I would see this as an observation.

MR. FARVER: Well, no. It was incorrect. The dose reconstructor chose the wrong

number.

CHAIRMAN KOTELCHUCK: But you were, somebody was arguing that the higher number was chosen in order to be claimant-favorable.

MR. SIEBERT: No, I'm sorry, maybe I've mis-stated that. Let me clarify. It is an error. The female would have been a larger value. And the DR accidentally picked the male. So I agree, it is an error.

CHAIRMAN KOTELCHUCK: Oh, oh, alright. Yes. Yes.

MEMBER CLAWSON: This is a finding.

CHAIRMAN KOTELCHUCK: Okay. It is. Alright.

MEMBER MUNN: If the other error had been made, if the error had been made the other way you could argue that it was favorable to the claimant.

CHAIRMAN KOTELCHUCK: That's right. Good. Okay. So, I propose we close this, and as a finding.

MEMBER MUNN: Agreed.

CHAIRMAN KOTELCHUCK: Okay. Moving along.

MR. FARVER: Moving along. Next one is Finding 3, the results for Pu-239 were discounted, or not considered. The employee met the following criteria listed in the DR guidelines, which indicated that for this EE a presumption of Pu-239 was not appropriate. And therefore, no Pu-239 was assigned.

The criteria were: all plutonium bioassays were negative, the employee was not assigned to the R building, and the overall presumed exposure for the general area worker will be assumed to be composed of more than 50 percent 238. So TIB-49 will not be applied.

However NIOSH agrees that because the CATI indicates that the individual responded to leaks, spills, decommission, taking material out of buildings, and that Pu-238 and 239 were potentially included in these situations, a claimant-favorable assumption could have been that exposure to Pu-239 was possible.

To correct this, missed dose was calculated for Pu-239 for a total of 25 millirem to the stomach, after accounting for OTIB-49 adjustment.

CHAIRMAN KOTELCHUCK: Okay. Now, this was an error for one single worker, or one type of worker. But a small -- presumably a small number of folks were employed in that?

MR. FARVER: I'd say this is case-specific.

CHAIRMAN KOTELCHUCK: Yes. Okay. And it looks like it to me also. So this is an error. It's a finding. And it happened. Okay. I think we would just close it as a finding. Okay, folks?

MEMBER BEACH: Sounds like NIOSH corrected the error. And I agree, it should be closed.

CHAIRMAN KOTELCHUCK: Yes, yes. Okay. Let's do that. 425.4.

MR. FARVER: 425.4. NIOSH summed doses from all three solubility types, instead of

only Type S. So apparently when we were reviewing the CADW report it looked like they just summed up all the doses, instead of assigning for just Type S.

Let me explain a little bit. I know when I run the CADW report I'll include the different solubility types, just so I have them all in one run. I don't have to run it three separate times.

And then you can select where you want to have that included in the final assessment or not. It's a little toggle you click on, and it includes it in the final numbers.

I believe what happened is, NIOSH just summed all these values up by mistake, instead of including just the Type S values. It resulted in an overestimate.

CHAIRMAN KOTELCHUCK: Right. Okay. NIOSH has corrected the error. Is this a case-specific error?

MR. FARVER: I believe this is a case-specific. This was a dose reconstructor

error.

MR. SIEBERT: I would agree with that.

CHAIRMAN KOTELCHUCK: Okay. Fair enough. Okay. Then let's close it and -- as a finding.

MR. FARVER: And that concludes Fernald.

CHAIRMAN KOTELCHUCK: Well, that concludes Fernald. Then I was figuring maybe we just go until 4:30 p.m. It's 4:23 p.m., 4:25 p.m. It's, maybe folks would like to -- we've covered a lot of ground.

MR. KATZ: Do you want to schedule, Dave?

CHAIRMAN KOTELCHUCK: Yes. We do need to schedule. Let's schedule. Thank you very much. So, yes. And may you lead us in this discussion, Ted?

MR. KATZ: Yes. Yes, let me just pull up a calendar so I can do that.

CHAIRMAN KOTELCHUCK: Fine. Good. That will make good use of our remaining time.

MEMBER MUNN: About what timeframe do you think we're looking at, Dave?

MR. KATZ: So it would have to be, I think Rose and Scott, I mean, correct me if I'm wrong. But I'm assuming there are plenty of other cases that are ready already, and then that would be ready in a couple of months. Is that correct?

MS. GOGLIOTTI: Absolutely.

MR. KATZ: Okay. So then, I think we can shoot for, you know, we're at the very end of April, May, you know, we could shoot for any, from sort of mid-June on I think we're good. So for example, the week of June 13th. How does that look for people?

CHAIRMAN KOTELCHUCK: Let me look. Let me see. It doesn't look right off, let me just see. Somehow I -- no, that would be okay.

MR. KATZ: So for example, somewhere in the middle of the week probably is good for, better for people in general. But, so let's say June 14th, 15th?

MEMBER MUNN: The 15th would be better

for me. Either that or the last week of June.

MR. KATZ: Well, let's start with this date first. But --

CHAIRMAN KOTELCHUCK: Right.

MR. KATZ: June 15 then, does that work for everyone on the line?

MEMBER MUNN: Yes.

CHAIRMAN KOTELCHUCK: Yes. Works for me.

MEMBER CLAWSON: I'd have to be able to leave an hour early, because I've got a meeting on that day.

MR. KATZ: An hour early is okay. I mean, I think that would still be worth -- that's most of the day.

MEMBER CLAWSON: Okay. I just wanted you to know. I didn't want to blindside you.

MR. KATZ: I just want to make sure. But let's see about everybody else. So, David, how about June, we're talking about June 15th.

CHAIRMAN KOTELCHUCK: Right. Sounds good for Dave Kotelchuck.

MR. KATZ: Yes.

CHAIRMAN KOTELCHUCK: And Dave Richardson?

MEMBER RICHARDSON: I have a meeting that day.

CHAIRMAN KOTELCHUCK: Ah, okay.

MR. KATZ: Okay. Well then, let's not. Because we really, we need to --

MEMBER MUNN: Yes.

(Simultaneous speaking.)

MEMBER RICHARDSON: The 14th is possible.

CHAIRMAN KOTELCHUCK: Yes. The 14th is good for me, better for me.

MR. KATZ: Wanda, can you deal with the 14th?

MEMBER MUNN: I'll arrange it, yes. I can --

CHAIRMAN KOTELCHUCK: If that could be done, it would be appreciated.

MEMBER MUNN: Okay.

MR. KATZ: Brad?

MEMBER CLAWSON: I'll make that day work.

CHAIRMAN KOTELCHUCK: Yes.

MR. KATZ: Okay. Then I also, that's already -- can we have -- and Josie?

MEMBER BEACH: That's fine for me.

MR. KATZ: So that's a good time or a bad time?

MEMBER BEACH: That's a good time.

MR. KATZ: Oh, good time. So then we, I mean, that's a sure quorum then. So let's, why don't we just take that, whether John Poston can make it or not.

CHAIRMAN KOTELCHUCK: Yes. Tuesday, 6/14. Hopefully he can.

MR. KATZ: Yes, hopefully he can. June 14th.

CHAIRMAN KOTELCHUCK: Okay.

MR. KATZ: That's not a problem for any of the sort of key staff?

MS. GOGLIOTTI: Not here.

MR. HINNEFELD: I think we can probably

make it work at NIOSH.

MR. KATZ: Thank you, Stu. Okay.

CHAIRMAN KOTELCHUCK: Sounds very good.

MR. KATZ: That's great. That's great.

CHAIRMAN KOTELCHUCK: Okay. Well then, folks, we have a date. And we accomplished a lot today. So let me thank you all for --

MEMBER CLAWSON: I've got one question, just for Ted.

CHAIRMAN KOTELCHUCK: Sure.

MEMBER CLAWSON: For our Board meeting, what date was that on? I've misplaced that.

MR. KATZ: The teleconference is in May. It's May 25th.

MEMBER CLAWSON: Okay.

MR. KATZ: But then the next Board meeting is August 8th to 9th, I think.

CHAIRMAN KOTELCHUCK: Yes. In Idaho Falls.

MR. KATZ: Yes. In your hometown, sort of.

MEMBER CLAWSON: Good, I may be able to make that, yes.

CHAIRMAN KOTELCHUCK: Alright.

MR. KATZ: You better.

CHAIRMAN KOTELCHUCK: If he could. Okay, folks, so we're closing now. June 14th. And 10:30 a.m. again, 10:30 a.m. to --

MR. KATZ: Oh. And we're just continuing on, right?

CHAIRMAN KOTELCHUCK: Right.

MR. KATZ: You could also pick up a couple of the blinds if you want to do that. Or you could just continue on like this. What do, what's --

CHAIRMAN KOTELCHUCK: I --

MR. KATZ: You're breaking up.

CHAIRMAN KOTELCHUCK: Okay. Let's ask other Members of the Committee. I would say we do one more meeting, and then address the blinds. Let's really get some --

MR. KATZ: That's fine.

CHAIRMAN KOTELCHUCK: -- a lot of cases under our belts.

MR. KATZ: As long as you have a full plate, I don't see why not. That makes sense.

CHAIRMAN KOTELCHUCK: Yes. Okay. So we'll just continue on cases. So we're going to have a very, we're going to have a brief agenda, which is one item, case review issues, reconstructions, sets 14 through 18. Other things will come up, I'm sure.

MR. KATZ: Yes, possibly. But thanks so much, everybody. This was great.

CHAIRMAN KOTELCHUCK: Yes. Thank you all. Have a good tomorrow and weekend. Bye-bye.

MEMBER MUNN: Likewise.

CHAIRMAN KOTELCHUCK: Bye-bye.

(Whereupon, the above-entitled matter went off the record at 4:28 p.m.)

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