CENTERS FOR DISEASE CONTROL AND PREVENTION

NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH

ADVISORY BOARD ON RADIATION AND WORKER HEALTH

TELECONFERENCE OF MEETING 151

WEDNESDAY, APRIL 19, 2023

The meeting convened at 1:00 P.M.

EDT via video teleconference,

Dr. Henry Anderson, Chair, presiding.

Vet Reporting

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Members Present:

Henry A. Anderson, Chair

Beach, Josie, Member

Cassano, Victoria, Member

Clawson, Brad Member

Frank, Arthur, Member

Kotelchuck, David, Member

Lockey, James, Member

Martinez, Nicole, Member

Pompa, David, Member

Roessler, Genevieve, Member

Valerio, Loretta, Member

Ziemer, Paul, Member

Registered Participants:

Roberts, Rashaun, DFO

Adams, Nancy, NIOSH contractor

Barton, Bob, SC&A

Behling, Kathy, SC&A

Buchanan, Ron, SC&A

Calhoun, Grady, DCAS

Crawford, Chris, DOL

Griego-Kelleher, Regina, DOE

Gogliotti, Rose, SC&A

Habighurst, Ashton, HHS

Lewis, Greg, DOE

Registered Participants Continued:

Mangel, Amy, SC&A

Ostrow, Steve, SC&A

Taulbee, Tim, DCAS

Registered Public Participants:

Donna Hand

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PROCEEDINGS

1:00 P.M.

WELCOME AND ROLL CALL

DR. ROBERTS: Welcome everyone. I'm Rashaun Roberts. I'm the designated federal officer for the Advisory Board on Radiation and Worker Health, and I'd like to welcome you to the first of the two sessions for Board Meeting 151. The second and final session of this meeting will start tomorrow at 1:00 p.m. Eastern as well. All of the materials for both sessions, the agendas, presentations, and other documents, are posted on the NIOSH website for this program under scheduled public meetings. So, what you would need to do is go to calendar year 2023 and click on the tab for April to find those materials.

If you are participating by telephone, you can go to the website to access all the materials that you need, and you can follow along with the presentations. The materials were provided to Board Members and staff prior to this meeting.

This meeting is being conducted by both telephone and via Zoom. On the website there's a zoom link which will enable you to hear and watch the presentations through Zoom. If you've chosen to receive audio through Zoom, you should be able to speak to the group and hear the presentations. If you're not speaking, please be sure to select and stay on mute by muting the microphone on the lower left-hand corner of your screen. If you've dialed in, you will only be able to speak and hear the presentations through the telephone line. So, please make sure that your phone stays muted

throughout, unless, of course, you need to speak. If you don't have a mute button, press star six to mute; and if you need to take yourself off, press star six again.

Also, if you're only participating by telephone and we're unable to see you, please identify yourself before providing your comments or questions. So, with that, let's just go ahead and move into roll call. As those of you who are Board Members and staff, as you register your attendance, please acknowledge sites where you have conflicts of interest, if any. And I'll note that for today's agenda there are no specific sites to be discussed, so there shouldn't be a need for anyone to disconnect from today's session. So, I'm going to do roll call, and let's start with Anderson.

CHAIR ANDERSON: Present, no conflicts.

DR. ROBERTS: Beach?

MEMBER BEACH: I'm here. No conflicts.

DR. ROBERTS: Hanford?

MEMBER BEACH: Or l'm -- or do I -- I'm sorry, do I need to say Hanford? Yes, I'm conflicted at Hanford. Sorry.

DR. ROBERTS: Cassano?

MEMBER CASSANO: Here.

DR. ROBERTS: Clawson?

MEMBER CLAWSON: I'm here. I'm conflicted at INL.

DR. ROBERTS: Okay. Frank?

MEMBER FRANK: Here, and I'm conflicted at Pantex.

DR. ROBERTS: Kotelchuck?

MEMBER KOTELCHUCK: Okay. I can't hear Kotelchuck. Lockey?

MEMBER LOCKEY: I'm here conflicted at K-25 and Y-12, Portsmouth, and Fernald.

MEMBER KOTELCHUCK: Kotelchuck coming back in. No conflict.

DR. ROBERTS: No conflicts, okay. Thank you. Martinez?

MEMBER MARTINEZ: I'm here. I have conflicts at Savannah River, National Lab, and Oak Ridge X10.

DR. ROBERTS: Thank you. Pompa? Pompa?

MEMBER KOTELCHUCK: Yeah, unmute, Dave. You've got to unmute, Dave.

MEMBER POMA: There we go. I'm here. I have a conflict at Pantex.

CHAIR ANDERSON: You need to put -- change your name on your QJX5 or CJX5.

MEMBER POMA: Yeah.

DR. ROBERTS: Yes, if you would put your name, that would be very helpful. Roessler?

MEMBER ROESSLER: Here, no conflict.

DR. ROBERTS: Valerio?

MEMBER VALERIO: I'm here, and I'm conflicted all New Mexico sites, Pantex, and Nevada Test Site.

DR. ROBERTS: Okay, great. It looks like we've got almost everyone here -- everyone here, I think so --

MEMBER ZIEMER: All but -- all but Ziemer.

DR. ROBERTS: Right, Ziemer.

MEMBER ZIEMER: Got to finish out the alphabet here.

DR. ROBERTS: Yes. Sorry --

MEMBER ZIEMER: And I'm --

DR. ROBERTS: -- about that.

MEMBER ZIEMER: -- conflicted at Oakridge X-10.

DR. ROBERTS: Okay, thank you. I got a little bit ahead of myself. Thank you. Okay. So, let's move into DCAS and ORAU.

MR. CALHOUN: This is Grady Calhoun. I'm conflicted at Fernald.

DR. TAULBEE: This is Tim Taulbee. I'm conflicted with a Mound.

MR. RUTHERFORD: This is LaVon Rutherford. I am conflicted at Fernald.

MR. NELSON: This is Chuck Nelson. I am also conflicted at Fernald.

DR. ROBERTS: Okay. Anyone else for DCAS/ORAU? Okay. Let's move on to SC&A.

MR. BARTON: Bob Barton, SC&A, no conflicts.

MS. BEHLING: Kathy Behling, SC&A, no conflicts.

DR. BUCHANAN: Ron Buchanan, SC&A, conflicted at Los Alamos.

MS. GOGLIOTTI: Rose Gogliotti, no conflicts.

MR. OSTROW: Steve Ostrow, no conflicts.

MS. MANGEL: Amy Mangel, conflicted at Pacific Northwest National Laboratory.

DR. ROBERTS: Anyone else for SC&A? Okay. Let's move on to HHS and contractors.

MS. HABIGHURST: Ashton Habighurst, HHS, no conflict.

MS. ADAMS: Nancy Adams, NIOSH contractor, no conflict.

DR. ROBERTS: And the departments, DOL/DOE?

MR. CRAWFORD: Chris Crawford, no conflicts, DOL.

MS. GRIEGO: This is Regina Griego, DOE, no conflict.

DR. ROBERTS: Anyone else from the departments?

MR. LEWIS: Yeah, this is Greg Lewis. Can you hear me?

DR. ROBERTS: Yes.

MR. LEWIS: Yeah, I'm here for DOE.

DR. ROBERTS: All right. And are there any members of the public who would like to register their attendance now? Okay, well hearing none, let's go ahead and move into the agenda. Again, please periodically check Zoom or your phone to ensure that you're on mute. On Zoom, the mute button is in the lower left-hand corner of your screen. If you're participating by telephone, press star six to mute, take yourself off by pressing star six again.

And, again, to assist the court reporter, I'm going to ask that if you're a speaker and would like to ask a question or make a comment, please identify your name before you speak.

I do want to let everyone know that there's a public comment period on the agenda today at 4:00 p.m. The public comment period will conclude exactly at 5:00 p.m. or following the final call for public comment, whichever comes first. So, if you do plan to comment, please be prepared to do so at 4:00 p.m. Eastern.

So, with that, I'll go ahead and turn the floor over to the Board Chair, Dr. Henry Anderson for the official welcome. Andy?

CHAIR ANDERSON: Rashaun, we got quite a crowd I see. Oh, we lost one. We have 58 participants online and greatly appreciate everybody coming and participating. We have all the Board Members present. That's a

challenge at times but worked well for this date.

So, I want to welcome everybody again to meeting 151. And let's begin right away with Grady Calhoun, update on the NIOSH program.

NIOSH PROGRAM UPDATE

MR. CALHOUN: All right. Thank you, Dr. Anderson. Can everybody see my slide?

CHAIR ANDERSON: Yes, got it.

MR. CALHOUN: Awesome. First try. That's pretty good.

CHAIR ANDERSON: Yeah.

MR. CALHOUN: Okay, yeah. This is Grady Calhoun. I'm the director of DCAS, and here's my -- my program update. I think this is my program update. Let's see if I can page down. Okay. All right. Just as far as contracts and staffing go, I think last time I reported that we were several health physicists short, but since last time we've hired three health physicists due to retirement and job changes. That leaves us with one opening, so that's good.

We also hired one administrative officer, and that was just due to a job change. Somebody else had left within the government, but they left DCAS, so we have a new admin officer.

IT update. Basically, we're continuing to process all cases manually. I know people from my staff, Lori and Angela have been working with Rose and we're trying to increase or improve as much as we can in this time. We're still basically at a steady state, which means that we're getting dose reconstructions out at the constant rate we're getting them in, so we're not

getting a backup or buildup of cases. We're processing them as quickly as we're getting them in.

We're still working on trying to get the site research database, at least some form of that data, available to you-all. And like always, if you ever need anything, please contact me or Lori or LaVon and we'll make sure that -- we'll do the best we can to get you whatever information you need.

Here's where we've gotten a big increase in activity. Let's see -- okay, there. As far as since everybody's allowed to travel again, we're starting to do more in-person workshops, outreaches, things like that.

So, we actually completed one in February. They were near -- there was two -- two events near Nevada Test Site in Tonopah Test Range. We recently completed an authorized representative workshop in the Hanford --

(Whereupon, Mr. Calhoun lost audio connection.)

CHAIR ANDERSON: Grady, you're breaking up.

DR. ROBERTS: Yes, Grady, we can't hear you.

MR. RUTHERFORD: I'll send him a message. Rashaun, this is LaVon. I just talked to Grady, and he has lost access shortly. He's trying to regain access and hopefully, he'll get that soon.

MEMBER BEACH: Well, it was too good to be true. We had no technical difficulties to start with. Started right on time.

CHAIR ANDERSON: Greg, I was just wondering if we wanted to move on and come back to Grady. Rashaun, should we do that?

DR. ROBERTS: I was hoping it would not take --

CHAIR ANDERSON: Yeah.

DR. ROBERTS: -- for him. Do you want to, maybe, give it a couple

more --

CHAIR ANDERSON: Let's give it a little more time.

DR. ROBERTS: Yeah, just a couple more minutes and if not, we can move on.

MR. LEWIS: Sure. And this is Greg. I wasn't proposing to skip him. I could go and he could go after me. What I -- you know, what -- I'm flexible, so.

CHAIR ANDERSON: Okay.

MR. CALHOUN: Can anybody hear me?

CHAIR ANDERSON: Yes.

MR. CALHOUN: Oh, my gosh, I'm so sorry about that. I don't -- I have no idea what happened. Let me see if I can share the screen again. Get back on here. All right. Is my -- is my screen back on?

CHAIR ANDERSON: Yes.

MR. CALHOUN: Okay. I'm sorry about that. I apologize.

Okay. I don't know where you lost me. I'll start at the top of this workshop and town halls. We completed outreach events near Nevada Test Site and Tonopah Test Range. We also completed an authorized workshop in the Hanford area on March 29th. We completed an outreach event just last week in Oak Ridge. And these are, again, a joint outreach task group, which is all three agencies, NIOSH, DOL, and DOE. We have one scheduled for May 16th in the Hanford area. We also have one scheduled for the last week in June, which is our underserved populations that we're trying to connect with. And that's a three-event week in New Mexico and Arizona. We're gonna be talking a lot about RECA and UMTRA sites there. We have

outreach events scheduled for August 16th for Fernald and Mound area. We also have an outreach scheduled for September 12th in the Rocky Flats area.

Okay. Record requests to Department of Energy, we have 87 requests out there between 61 and 120 days; zero over 120 days or between 121 and 180; and then we have just one that's hanging out there over 180 days, and that's the Albany Research Center.

Case status reports, we've got 56,043 individual cases from Department of Labor. We returned 53,827 of those. Twelve -- 1273 are currently at our shop for dose reconstruction and 943 have been administratively closed. We've returned 48,338 to Department of Labor with a dose reconstruction. 1841 have been pulled from the dose reconstruction process by DOL for some reason, and then 3648 have pulled from dose reconstruction because they qualified under the special exposure cohort for whatever site they were associated with.

Overall probability of causation summary. This is as of April 7. 48,338 individual dose reconstructions. This does not count re-dos. This is just individual dose reconstructions. 35,454 are less than 50 percent, and that's about 73 percent of the total. 12,884 were greater than 57, which is about 27 percent of the total. And that's -- falls in line with what we've seen historically. It hasn't changed a whole lot. Typically, the cases have been between 25 and 30 percent that were greater than 50 percent and are compensable, and those that were not compensable are seven -- about 70 to 75 percent of the cases that we -- we do.

We have 1265 cases at NIOSH for dose reconstruction, 938 of those are actually in the process, 275 of those are in the hands of claimants

waiting for close out interviews or for them to return their OKAS-1 forms, and then 52 cases were getting ready to start the dose reconstruction, which means gathering the data that's necessary.

And that is all I have for my update. Hopefully, you still hear me. Any questions?

MEMBER BEACH: Hi, Grady. Henry, if it's okay, I have a question. If you go back on your slide six and seven, those numbers, how -- how far back do those numbers go? Are -- that --

MR. CALHOUN: That's to the very beginning.

MEMBER BEACH: The very beginning? Is it possible to break those down into, like, the first 10 years or the second 10 years or what's been happening in the last five years? Is it -- is it possible to get a little bit of a breakdown on those numbers?

MR. CALHOUN: I mean, this is a snapshot in time, but what kind of numbers are you looking for, actually?

MEMBER BEACH: Well, I -- I guess I'm curious. The program has been in place for the last 21 years or so. I'm curious what the numbers were for maybe the first 10 years and the second 10 years, and what the last five years look like. I -- I don't know if anybody else wouldn't be interested in that, but it just struck me as these are really big numbers, and I'm just kind of curious, the ebb -- the flow of how this has been for the last 21 years.

MR. CALHOUN: So are you looking at, like, the rate that we're doing these, or are you looking at compensability or what -- what kind of information are you looking --

MEMBER BEACH: You know, I don't know about the compatibility. I just -- I guess I was just looking at more how many have come in, let's say, in the last 10 years versus the first 10 years.

MR. CALHOUN: Oh, yeah. Yeah, I can get you that really easy.

MEMBER BEACH: Yeah, and I don't mean it to be complicated. Just --

MR. CALHOUN: Oh, no. I've been tracking that for years.

MEMBER BEACH: And, you know, it doesn't have to be right away if -- the next meeting is fine. I'm just more curious than anything.

MR. CALHOUN: Yeah, we -- we've actually -- when you look at the returns as well as the initial cases, we're still somewhere in the 200-a-month area, and we've stayed -- we've stayed relatively consistent in that for the last, I don't know, 12 years probably. But I -- I do have the graphs that I can show you.

MEMBER BEACH: Yeah, yeah.

MR. CALHOUN: (Indiscernible) --

MEMBER BEACH: That's what I was interested in.

MR. CALHOUN: We had a big influx at the beginning the program when it first started, and we pumped them out a lot faster because we had such a backlog to deal with, but now if you just look at the cases coming in from the Department of Labor, the new cases and the reworks, it's 200-250 a month. And that's held steady for a long time. And to be honest with you, we really thought, I think, that was probably going to decrease over time, but it just hasn't. And that's just because there's so many claimants out there, and unfortunately so many of us get cancer. And that's -- you know, that will continue. But I -- I will get you that information, Josie.

MEMBER BEACH:

MEMBER BEACH: All right, thanks, Grady.

CHAIR ANDERSON: And it would be interesting to also get a breakdown of the diseases.

MR. CALHOUN: Of the way? I missed that.

CHAIR ANDERSON: Well, it's either -- is the distribution of diagnoses of cancer changing?

MR. CALHOUN: Oh, geez.

CHAIR ANDERSON: (Indiscernible) if it's in the database, then fine, otherwise, no. I mean, are we getting an increase -- more lung cancers, or?

MR. CALHOUN: Oh, no, I don't -- I -- we might be able to do that. What I can tell you is that due to the fact that so many people are now covered under the SEC, that the number -- the proportion of non-SEC cancers has gone up significantly because we don't do dose reconstruction non-SEC cancer or for SEC cancers, so --

CHAIR ANDERSON: Right.

MR. CALHOUN: -- that means that the -- the proportion of skin cancers and prostate cancers and things that aren't covered under the 22 have gone up significantly. They're just a much higher proportion of the overall number.

CHAIR ANDERSON: Yeah. That's -- that's kind of what I was thinking was happening, but it'd be just interesting. Thank you.

MEMBER CLAWSON: Grady, this is -- this is Brad. I know that what Josie asked is a breakdown, and I know that you've showed me that once before. I think was eight or nine years ago of -- from the very beginning of

this per year, how many we had come in, and so forth like that. So, when I look at all these cases to NIOSH and DOL, what -- is there any way of -- which ones are separated by the SEC and which ones are -- are not?

MR. CALHOUN: Well, you can see this one in particular, three hundred -- three -- 3648 were pulled, but I'd have to go back and look, if you wanted to see, like, the overall proportion of the total cases that we've received, how many have been pulled for SEC. I'd have to look at that. Now, you-all know that -- that once an SEC is established, if somebody qualifies for it, those numbers won't be included in there because we'll never see it.

MEMBER ZIEMER: I think the Department of Labor gives a breakdown of that.

MR. CALHOUN: Yeah.

MEMBER ZIEMER: And so -- this is Ziemer, by the way, for the court reporter. But the regular -- the answer to Josie's question, I think, actually, we used to see that almost every time that the monthly input and the monthly out. So, I know that those figures are sort of readily available. So that shouldn't be a problem. I don't know about Andy's question. That -- that could be a challenge.

But I have a separate -- a different question unless you want to talk about these subjects more.

MR. CALHOUN: No, you can -- what I -- what I will say is that those -- those records quit -- stopped when we lost our -- our -- our --

MEMBER ZIEMER: Right.

MR. CALHOUN: -- ready access to our database.

MEMBER ZIEMER: Right, right.

MR. CALHOUN: That's why you don't see those as often. But ORAU can certainly gin up those numbers for us. But go ahead, Paul, with your other.

MEMBER ZIEMER: My separate question had to do with your recent hires of, I think it was, three health physicists. And the question I have is, are you able to hire health physicists that are fairly experienced, or is the market mainly, sort of, fresh out of -- fresh out of their programs? I'm kind of getting at how -- how difficult or easy it is to get the folks oriented into the program to a productive point.

MR. CALHOUN: Well, Paul, I -- people are gonna think that you set me up with that question, because I've got some -- some good news for that. But --

MEMBER ZIEMER: Good, good.

MR. CALHOUN: -- just to start overall, the previous time we went out to look for new hires, I was at the health physicists conference. And as some people know, there's a help -- there's a -- we need health physicists board, and there's a health physicist that needs job board. The health physicists needing job board was empty, and the we need health physicists board was full. So, the number of health physicists that are available are -- are -- are few and far between.

They're just not producing as many of them as they used to. And as you know, there's -- a lot of schools are closing down. You know, I mean, I went to University Cincinnati for my health physics degree. I was in the first class, and they've been closed for years, but anyway -- and that's happening across the country.

But as far as getting new health physicists in, we've got two new health physicists that you will all recognize because they're not all that new. Megan Lowbaugh (ph) left us to go to DOE, but she decided to come back. So, she's one of them. Okay, so she knows it inside and out. Brandt Ulsh (ph) left us nine years ago; he came back. And so --

MEMBER ZIEMER: Oh, wow.

MR. CALHOUN: -- he knows the program inside and out. And then we have a relatively new health physicist. She has experience. But her name is Maisha Murray (ph), and she is -- she's one that we're going to have to get up to speed on this actual program. But we were very lucky to get all three of them, but especially Brant and Megan because they're really going to be able to hit the ground running, so --

MEMBER ZIEMER: Good.

MR. CALHOUN: Yeah, that's -- that's -- that's the state of health physicist -- health physicists in the in the country right now, it seems.

MEMBER ZIEMER: Okay, thank you. Means you have to pay them the big bucks though, right?

MR. CALHOUN: Well, there's -- as you-all know, the government has a structured pay scale --

MEMBER ZIEMER: I know.

MR. CALHOUN: -- and that's all we can give them.

MEMBER ZIEMER: I know. Just kidding.

CHAIR ANDERSON: Way to -- way to set that up, Paul. I saw that one coming a mile away. Since you -- since you and Genevieve have lost, we haven't produced the health physicists we need.

MR. CALHOUN: Well, you know, they just fired up that new power plant down in Georgia, so maybe we're gonna see a renaissance.

MEMBER ZIEMER: Actually, that's probably the case.

MR. CALHOUN: Well, there's a lot of us getting old too. I mean, I'm not that old, but there's a lot of us that need to be replaced for a variety of reasons.

MEMBER ZIEMER: Well, I think it's time for a word from our -- or an ad from Purdue University and University of Florida, right, Gen, and maybe Texas A&M.

UNIDENTIFIED SPEAKER: Texas University.

CHAIR ANDERSON: (Indiscernible), Grady.

MEMBER VALERIO: Grady, this is Loretta. I have a question.

MR. CALHOUN: Okay.

MEMBER VALERIO: On slide six, the cases that are pulled from dose reconstruction by DOL, do you have a tracking mechanism if any of these are, you know, eventually returned for dose reconstruction? Do you ever see that?

MR. CALHOUN: I haven't seen the overall statistics, but there's a variety of reasons that they could be -- be pulled. And like, for example, if -- if the claimant does not sign the OKAS-1 form, then we cannot go past the draft stage and cannot finalize the -- the -- the dose reconstruction.

But I can tell you that there's multiple times where we'll have either a new claimant, whether that's a survivor or a change of heart of the -- the actual employee, and they will reinstate it. So, a case is never pulled forever. And there's always a mechanism to get back into the program, and

it's not difficult. So, any new cancer or just a new desire to get back in the system, as long as they contact DOL, they'll get back in. So, I do not have a breakdown of why or how those cases are pulled by DOL. We just -- we'll get a message that says this case is no longer necessary to get a dose reconstruction done.

CHAIR ANDERSON: Any other questions? Okay, thanks a lot, Grady.

MR. CALHOUN: All right. I'm going to stop sharing, and then I'm going to start sharing again, because I'm sure that Mr. Crawford will be able to answer all of the questions there. How was that, Chris? Hold on.

MR. CRAWFORD: Talk about setting me up here.

CHAIR ANDERSON: Right. Great expectations.

DEPARTMENT OF LABOR PROGRAM UPDATE

MR. CALHOUN: Okay, let me get back to this. Screen share. I have way too much stuff up here. Department of Labor. Oh, man, get rid of that. All right. Can you see that?

CHAIR ANDERSON: Yes.

MR. CALHOUN: Okay. Chris, I've got the first slide up, and I will go to -- I've got your cover sheet up, I'll go to the next one.

MR. CRAWFORD: Great.

MR. CALHOUN: Compensation paid.

MR. CRAWFORD: Exactly. This changes only slowly but go through it. The Part B compensation paid is 7.7 billion, our E compensation paid is 6.3 billion, and we've also paid $9 billion in medical bills, $23 billion in total compensation, plus medical bills paid. That's based on 230,401 cases filed.

Next slide.

MR. CALHOUN: Okay. Compensation. NIOSH-related SEC MDR cases.

MR. CRAWFORD: Right. As we see here in the top lines, we have $1.7 billion dollars paid on dose reconstruction cases, non-SEC cases in other words, with 16,157 payees. We also have $188 million for the rare cases that are both SEC qualified and accepted and have a POC greater than 50 percent. That will occur in some cases because an employee might have had a noncovered cancer as part of the SEC nonqualified and will want to get a POC greater than 50 percent so that they can get medical benefits on that cancer as well. We have 14,038 payees in that category.

Next slide.

MR. CALHOUN: NIOSH referral case status.

MR. CRAWFORD: Right. Our numbers differ somewhat, as always, but we show 56,902 cases referred to NIOSH for a dose reconstruction. All of these are through March 31, 2023, by the way. We've also had 55,201 cases returned to DOL from NIOSH. Of those, 48,359 are at DOL with a dose reconstruction. By the way, I noticed NIOSH's number here is very close. It's 48,338 dose reconstructions sent back to DOL.

Next, we have 6842 withdrawn from NIOSH with no dose reconstruction. As Grady has indicated, there are several reasons why that can happen; new SECs, the loss of eligible survivors, many things can cause that to happen. And we show 1701 cases currently at NIOSH.

Slide, Grady.

MR. CALHOUN: Part B cases with dose reconstruction.

MR. CRAWFORD: These numbers don't change much either. Of the 38,063 cases with dose reconstruction and a final decision, you see that 34 percent had final approvals, 66 percent final denials. In numbers, final approvals were 12,963, final denials, 25,001.

Slide.

MR. CALHOUN: Part B cases.

MR. CRAWFORD: This may have a partial answer to someone's question. If we look at the SEC cases, on the left-hand side of the pie chart, we see that the total SEC cases come to 25 percent. These are -- some of them were sent to NIOSH and some were not. RECA cases consist of 77 percent of the total cases filed. Other is the biggest category with 38 percent, and that includes beryllium sensitivity, chronic beryllium disease, and chronic silicosis. And finally, NIOSH receives 30 percent of the cases plus, of course, the SEC cases referred to NIOSH.

Next slide there.

MR. CALHOUN: Part B cases with final decisions.

MR. CRAWFORD: Right. This will include the SEC cases. Cases with part B final decisions, 54 percent are approved, 46 percent are denied. That's a total of 112,075 cases with final decisions. 60,366 were approved under Part B and 51,709 were denied.

Slide.

MR. CALHOUN: Top four work sites,

MR. CRAWFORD: As usual, our largest sites, Nevada Test Site, Savannah River Site, Hanford, and the Y-12 Plant.

Next slide.

MR. CALHOUN: SEC facility, one of two.

MR. CRAWFORD: All right. Since we're discussing Savannah River Site during this meeting, this is -- are the -- this consists of the numbers related to that site on two pages. We start with the number of cases; that's 21,997. That includes Part B and E. Then we had cases returned by NIOSH with a dose reconstruction so far; that's 6596 cases. And we have final decisions under Part B, 9202 cases.

Second slide of Savannah River.

MR. CALHOUN: There you got it.

MR. CRAWFORD: Okay. Part B approvals, we have 4133, Part E approvals, 5318. Total compensation and medical bills paid 1,964,157,240, more or less.

Next slide, please.

MR. CALHOUN: JOTG outreach.

MR. CRAWFORD: Right. So, the joint outreach has picked up again, it looks like. We'll go back to Q1 at the end of the joint outreach presentation, but the one that's just held is the April 11 through 13th workshop and presentation at Oak Ridge itself. Had an AR workshop for two days, April 11th and 12th. I don't have any numbers here. Maybe there'll be coming later; it's pretty recent.

April 13th, we had a DEEOIC presentation, a medical benefits presentations, the joint outreach test group presentations, and claims examiner, slash, medical benefits examiner one-on-one meetings after presentations.

Slide.

MR. CALHOUN: Gotcha.

MR. CRAWFORD: Okay. This is coming up, the May 16th, Pasco, Washington, in other words, Hanford presentation that Grady has already mentioned. On May 16th we have a DEEOIC presentation, medical benefits presentations, going to outreach presentations, and claims examiner, slash, medical benefits examiner one-on-one meetings again.

Next slide, please.

MR. CALHOUN: New Mexico and Arizona Outreach.

MR. CRAWFORD: Right. Grady also specifically mentioned this as our possibly underserved populations in New Mexico and Arizona, RECA people, among others. June 27th through the 29th this year, we will be holding outreach presentations in Farmington, New Mexico; Shiprock, New Mexico; and Kayenta, Arizona. These will in -- I guess, in all three sites will include a DEEOIC presentation, medical benefits presentations, JTOG presentations, and the claims examiner/medical benefits examiner one-on-one meetings.

Next slide.

MR. CALHOUN: Previous outreach events.

MR. CRAWFORD: Right. Going back, not so far, to March, we had changes to pharmacy benefits -- these are virtual events -- with 246 attendees. Well -- well attended. We also had an exposure and causation presumptions outreach webinar in February with 288 attendees. And in January, presumably 2023, we had 214 attendees for the authorized representative -- representative services and expectations webinar. And going back a little farther, November of 2022, we had a webinar on new billing and authorization codes for home and residential healthcare, 233

attendees.

Slide.

MR. CALHOUN: Las Vegas, Previous Outreach.

MR. CRAWFORD: Exactly. At the town hall meetings for the joint outreach group, Las Vegas with 175 attendees in March, and then in February, we went to Pahrump, Nevada with 25 attendees. Pahrump is a small town compared to Las Vegas, so that explains the difference.

Next slide.

MR. CALHOUN: These are handouts slides now, Chris.

MR. CRAWFORD: That's it. We are finished with the presentation then, and any questions?

MEMBER BEACH: I'll start. This is Josie Beach. On your slide two, much the same question as what I asked Grady, can you break that compensation down into the -- it's such a big number -- into the -- the years, maybe, ten year -- the first 10 years, second 10 years, just out of curiosity. Kind of interested in where the program's been going and -- or if it's a steady state, like Grady had mentioned. Do you -- do you track that at all?

MR. CRAWFORD: I am going to have to find out how much they can do for me. It's a different department, and it's a little bit of a mystery to me, but I will find it out. So, you'd like 10-year breakdowns for the existence of the program, essentially?

MEMBER BEACH: Yeah. And maybe the last five years if it -- I know it'll overlap the first 10 years, second 10 years since it's only been 21 years. Just curious of kind of where it's been going from -- from the conception.

MR. CRAWFORD: Exactly.

MEMBER BEACH: And then on slide 10, can you give us a breakdown of what the new -- the new SEC at Savannah River from '71 to '90, how has that changed the numbers or -- or is that documented in your slides as of yet?

MR. CRAWFORD: I will, again, ask about that.

MEMBER BEACH: Okay, I was just curious.

MR. CRAWFORD: Right, exactly. I haven't heard anything about it yet. I'm sure it's having an impact, but I don't know what it is yet. So, you'd like to know how many cases have been processed and how many -- I assume how many accepted and how many not --

MEMBER BEACH: Yeah, just --

MR. CRAWFORD: SEC?

MEMBER BEACH: Kind of curious how fast that process works.

MR. CRAWFORD: And it requires a lot of review of already processed cases, so that may take a while.

MEMBER BEACH: Okay, thank you.

MEMBER KOTELCHUCK: Dave Kotelchuck. In slide 14, I'm just curious. The first subject was -- I said 14, no. Up -- the next one. I thought -- previous outreach events, virtual seminar, yeah. How does -- upcoming changes to pharmacy benefits, how does that fold into anything having to do with our process? People --

MR. CRAWFORD: It essentially has, of course, no connection directly to EEOIC or acceptance of the case, but for people who have medical benefits, there may have been some drugs that were -- this is speculation,

I'm going to have to check this, but I believe there may be some drugs that were not approved by Medicare and therefore probably not paid, even though they were claimed. Things like that.

MEMBER KOTELCHUCK: Okay. Okay.

MR. CRAWFORD: So, it's a little bit far afield of where we are.

MEMBER KOTELCHUCK: Sure.

MR. CRAWFORD: -- ask about that.

MEMBER KOTELCHUCK: That's fine. I just wondered. So basically, they're Medicare benefits -- medical benefits. Sure. Thank you.

MR. CRAWFORD: Sure.

CHAIR ANDERSON: Other questions?

MEMBER ZIEMER: This is -- this is Ziemer. I just wanted to thank Frank for providing the numbers on these virtual seminar series and the outreach numbers, because I think it's important that we know how many people are being reached. I did have one question on the webinars. These would cover people, I assume, from all over the country; is that not correct?

MR. CRAWFORD: That's correct. And some of --

MEMBER ZIEMER: So, I --

MR. CRAWFORD: -- the meetings, it's very specialized. So, it is likely --

MEMBER ZIEMER: Right.

MR. CRAWFORD: -- that maybe the ARs will have represented multiple

claims.

MEMBER ZIEMER: Yeah. Nevertheless, I was -- I was personally

pleased to see this many people participating in the -- in those webinars. I think that's -- that says a lot for what you're doing on the outreach. I appreciate that. Thank you.

CHAIR ANDERSON: Do you do evaluations on these? I'd be interested on the virtual webinar. I mean, that's -- it should be easier to get people or a broader range of sites and locations to dial in.

MR. CRAWFORD: Last time --

CHAIR ANDERSON: Yeah.

MR. CRAWFORD: Excuse me, Doctor.

CHAIR ANDERSON: I mean, it --

MR. CRAWFORD: -- the last time I asked about that, there was a problem, especially on webinars, in that, that there is no bar to entry, essentially. So, we may not know who's on there.

CHAIR ANDERSON: Okay.

MR. CRAWFORD: And that would prevent us, of course, from getting further information from them. But I will check that again.

CHAIR ANDERSON: Well, I just -- I mean, I think continuing to promote the webinars if -- if it's found to be, you know, very beneficial or useful to -- to the participants versus the face-to-face kind of programs, which are far more challenging to organize and fund and implement and get people there. That's what I'd be interested in is, are you going to expand the webinar series more, or?

MR. CRAWFORD: I'll certainly ask and see what I can find out from them.

CHAIR ANDERSON: Yeah.

MEMBER BEACH: Well, this is Josie again. That can go two ways because some people are technic -- technology challenged where they would prefer to show up in person. So, you -- if you kind of don't do both, you eliminate one group or another or could possibly.

CHAIR ANDERSON: Yeah, yeah. Any other questions? Okay. Let's move on to DOE then.

MR. CRAWFORD: And thanks to Grady for helping me with the slide presentation, as usual.

MR. CALHOUN: Of course.

DEPARTMENT OF ENERGY PROGRAM UPDATE

MR. LEWIS: All righty, good afternoon, everyone. This is Greg Lewis. I think on the agenda might have said that Gina was going to give the update, but we -- we switched off, and so I'm gonna give the update for today. And Grady, are you able to -- oh, there we go. Never mind. My slides are -- are up. So, I guess I will get started. You can go to the first slide, Grady.

And so -- and actually, before we even start, I'll just say for those who don't know me, I'm Greg Lewis, the director of the office of worker screening and compensation support, which is org code, EHSS14 within the office of environment, health, safety, and security at DOE. I've got some news and notes here, but one thing I did want to clear up.

I spoke with a few of you since the last meeting, and there was a little bit of confusion about my role in the program. So, I'll just clarify a little bit. Gina Griego-Kelleher is the program manager for the EEOICPA program, but

I am the office director in charge of the (indiscernible) program, and we also handle the home war for medical screening program, which you'll see later my slides. So, Gina has been taking, you know, a bigger role in the day-to-day program management, of course, and I have been focusing a little bit on the former worker program recently or a little bit more, I should say, recently. But there was a little bit of confusion because she was doing the presentations that I might not be involved in the program any longer. And that's not correct. I am definitely still very involved in NOEFA (ph), although, again, Gina may be -- you know, it's more of the primary contact for, you know -- for -- for Board issues or for -- for NIOSH issues. I'm still very much involved.

So, for some program news, and actually, I think Chris and Grady covered the outreach efforts in detail. I just put on the Oak Ridge event that we just recently participated in, but we've also participated in all of the past outreach meetings or at least the JOTG meetings and are planning to participate in the meetings coming up this summer and fall. And as has been previously noted, there -- there definitely is an uptick in outreach.

And on that note, it's not on my program news, but also, we in the former worker program are also pursuing the virtual avenue as well. We -- we did during COVID with a few different initiatives, but recently in the last year, we've started larger nationwide, virtual outreach sessions similar to what the Department of Labor does. In fact, you know, prompted by what the Department of Labor does. We saw how successful their efforts have been.

So we have been doing virtual outreach sessions, and we've been

getting, I think, about 300 people on -- on the first two sessions that we did, and many more that signed up that didn't show for the event. So, we've also found that they're very successful. They're -- they're a lower cost and effort to put on and with the ability to reach, I think, many more people. And nationally, I think they're certainly an advantage.

And we're going to continue to do that, although within the former worker program and the JTOG, we're also still doing the live in-person meetings. Most because of what Josie pointed out, that not everyone prefers the online format, but also, you know, I think some like the direct contact. And I know at the JOTG meetings, DOL has a traveling resource center and is able to actually directly answer people's questions about their claims. So that -- that's something that we really can't -- you know, we're not able to offer in a virtual setting. So, there's -- there's definitely still value to doing the in-person meetings, but we are aggressively pursuing the virtual meetings as well.

A couple things our office is working on. We are in the process of updating the MOU. We have an MOU, both with Department of Labor and NIOSH outlining the roles and responsibilities of each agency arm. So, we're updating our MOU with DOL right now. And we're starting to, you know -- we tackle that one first, but we're also going to start to update the NIOSH MOU as well. I don't envision any program -- you know, large scale changes to what we're doing. But it's one of the things we're just trying to stay current as -- as things change. Things change, make sure all the references are correct, and make sure that the document is keeping up with how the work is getting done in real time.

And then on a staffing note, we have hired new direct support contractor, Mr. Jordan Young. He's been on since early January, and he's helping Gina and I. He's primarily on the EEOICPA helping us with the compensation records and such, but he is also helping a little bit on the former worker program, but we're really going to be relying on him -- oh, you know what I just realized, I didn't have my video on, speaking of technology. Anyway, we are really going to be relying on Jordan for a lot of our metrics, our numbers, our stats, our reporting, and really trying to get our on-time performance up.

And that's -- I -- I -- I didn't put it on the slide, but that's the other thing I wanted to mention. Grady had a slide showing the number of claims we have from, I think it's, 60 to 90 and 90 to 120 and etc. Since COVID those numbers haven't been where we wanted them to be. I mean, COVID really threw us for a loop. And then actually a lot of the staffing changes during COVID -- during COVID a lot of the people out in our field sites that had been our main point of contact and manager for the compensation records, a good number of them retired or -- or moved on. So, we had some staffing challenges.

And then last year, we also had some challenges with -- we had to change our procedures with respect to PII a little bit. So, we've kind of had a -- over the last three years, we've had a number of issues in our performance in terms of getting the responses back to DOL and NIOSH in under 60 days. We're down around 85 percent, where they had historically, or at least in the five years preceding COVID, they -- they had been up in the 95 percent or above range. So, we were down at 85 percent. This year

in the first six months of this fiscal year, so from October to -- through now, we're back up at 90 percent. So, we're not quite at the 95 that we want to be at. And I know on Grady's chart and in meetings past, we did have some that were over 100 days and even over 150 days.

But, you know, as you can see from Grady's chart, there are still some that over 60, but they're, you know, primarily between 60 and 90, and we anticipate in the next six months, we'd really like to even improve on that and start to get back into that 95 percent and above in terms of returning responses within the 60 days. So, we are making progress. There is still some work to do. I think that's it in terms of program news.

Grady, next slide.

I'll go through this pretty fast. These are -- you know, these slides, I've had on there for probably many meetings past, but there are a few new faces on the Board and there may be some folks in the audience (indiscernible) is familiar. So, for YOFA (ph), DOE has three main responsibilities. We respond to individual records requests. So, if someone filed a claim or needs a dose reconstruction, DOL and NIOSH are going to send that request through my office to the site or sites that that individual worked at. And that's what we're trying to get back within 60 days. That's kind of the first and foremost -- that's the primary responsibility we have under the Act.

The second responsibility is to provide support to NIOSH, DOL, the Advisory Board to various contractors on a large-scale site characterization or records research projects. So, these are the SEC, you know, investigations or the -- the SEC research projects or for DO -- for DOL, the

site exposure matrix, things like that.

And then the third responsibility, which is extremely important, although much smaller in terms of workload and staffing, is to conduct research on the covered facility issues. So we work very closely with NIOSH and DOL on those, and that we actually host the covered facility website that has the up-to-date listing of the facilities that are covered, the years, and a brief description.

Next slide.

I won't belabor this, but for the individual records requests, just for those that aren't familiar, we often have to go to multiple different places, particularly for -- for longtime employees, career employees, their records could be in different locations within the site, like medical IH, you know, radiological controls, human resources, you have to go to different places. And then they also could be in different formats so that, you know, there could be records in microfilm, microfiche, paper records, electronic records, you know, particularly as -- as contractors changed at the site, there might be, you know, five years where things are in one database, and then the next 10 years, it's in a separate database. So, it's not quite as easy as going to a file cabinet and pulling out someone's file with their name on it and sending it in. It really is a bit of a -- you know, a surge, a detector process to make sure that we are understanding when and where that person worked on site, and we're locating all records relevant to their claim.

Next slide.

And, of course, the main support that we give to the Board is for the large-scale records research projects. We've -- and this is by no means

exhaustive, but I just kind of looked back through my emails to see, you know, what we had really been -- been working on in the last month or so. And looks like we're supporting NIOSH at -- and the Board at Pacific Northwest National Lab, the DOE Office of Legacy Management, Los Alamos National Lab, and Sandia National Labs. And there's probably others, but, again, those are kind of the four that I that I saw that were most obvious recently. At any given time, there's usually, you know, five to 10 different research projects going on that we may be supporting off and on.

Next slide.

And then document reviews. You know, so for the records requested, both from the sites and for final NIOSH reports, like SEC evaluation reports, things like that, DOE does review those for classification. All documents don't necessarily need to be reviewed, but when they do need to be reviewed, you know, my office helps facilitate that review, both on site or at headquarters with the DOE Office of Classification. Particularly for the work done at headquarters, the average turnaround time for reports is about eight workdays. Again, these are generally NIOSH or SC&A generated documents, their reports; they're not tremendously long.

What's much more challenging is the source documents requested from the field. Sometimes, you know, NIOSH or SC&A can request, you know, 50 to 100 documents, they can be, you know, many pages long, you know, hundreds of pages long. So those types of requests, it really is on a case-by-case basis, but we do make sure to work with NIOSH or SC&A, the requester, to figure out well, you know, it's 1000 pages, it's going to take us, you know, X amount of time. You know, we -- we -- if we need to

prioritize, say well, you know, these five documents are, you know, the most important, they should be first, and these are less important.

So, you know, we do that. We can help prioritize. If it's urgent, we can try to secure additional staff, although sometimes that's challenging. So, you know, again, with the reports, we have kind of a set system with the source documents. We do our best to work with the requester to make sure that the time frame is -- is something that they can work with.

Next slide.

Yeah, this is a facility research. There's a link to our covered facility website. There's over 300 facilities covered. A lot of those other smaller AWEs that they go back into the '50s and '60s. But, you know, if there's questions, or -- you know, I always encourage folks, if you see something on there that doesn't seem quite right or -- or you think it should be different, we're always willing to take a second look at or -- or see what we can find and make sure that our information on there is accurate.

And next slide.

And I just want to mention this is the other program that's -- that's supported by my office. And there's actually a few folks on the Board that have experience with that program. We, in addition to supporting the records work for the compensation program, my office funds and supports a former worker medical screening program, which serves all former workers from all DOE sites, or I guess it's offered to all former programs from all -- former workers from all DOE sites. We don't necessarily screen every single worker.

But yeah, it's a program that's available to any former worker, federal,

contractor, or subcontractor that would like a screening. It's, you know -- because it's a screening exam, this is designed to catch things early. So, this isn't something that you wait until oh, I'm not feeling well, maybe I should go in for screening. This is something that we encourage folks to do. And they can return every three years for rescreen. So, it's a surveillance program in that sense.

And so, you know, when you feel good, that's the best time to come in. You know, there may be things going on that we might be able to catch early. And if not, you know, you get a clean bill of health and some peace of mind. So, I always encourage folks, you know, either if you're eligible, participate, or if you're connected in the worker community, encourage those workers that you're interacting with to participate. It's an incredibly valuable program, and it's at no cost to the worker and can be done in locations close to their home. So, it's convenient, it's free, and it might save your life.

So next -- next slide.

And that's our website and brochure about the program. And I think that next slide is questions.

CHAIR ANDERSON: Any questions?

MEMBER CLAWSON: Yeah, this is Brad. I've got one for Greg. It's good to see you again, Greg. It's been a long time since we've seen you.

One of my questions are, and especially, I guess, you guys would call it the legacy site where they've been cleaned and closed, and they don't really have a storage facility for their documents, isn't there a way that we can track where they were sent to a little bit better? I -- I -- I'm talking --

well, for one thing Pinellas, Rocky Flats, some of these sites have been cleaned and closed like this, it seems like we're finding documentation throughout the United States at places. And I'm just trying to figure how -- how we assure that we've got all the proper information and that we've gone to the right places.

MR. LEWIS: Sure. So, yeah, I can address that a little bit. I think -- so, it's not really one size fits all with these closure sites. In fact, Pinellas, I think we -- we've talked about this a little bit before, but Pinellas is a particularly challenging site. I'm not exactly sure why, honestly, but -- but for whatever reason, when Pinellas closed, and I believe that was the mid -- mid '80s that it closed, somewhere in there -- or the cleanup might have lasted a little bit longer -- but the record seemed to be spread to a number of different locations, depending on where that mission element went in. And so, there's at least three or four different places throughout the country, I think, that we've -- you know, sites, I guess, we can say, throughout the country where they found Pinellas records. For a lot of the other closure sites, it's a lot more straightforward.

In fact, the Office of Legacy Management is set up to -- I mean, they do -- they do a few different things as far as, you know, mock stewardship for DOE sites. And one of the major functions of that office is to be a repository for the closure site records. So, you know, places like Mound, Fernald, Rocky Flats. Rocky Flats' records are in a few different places, but the vast majority of Rocky Flats' records are with the Legacy Management office. And the same thing with -- with Mound and Fernald; I think almost all of the Mound and all of legacy records are with LM.

So, LM has quite a bit, but it's certainly, you know, not everything. Nothing at DOE is 100 percent consistent, and certainly Pinellas is a real challenge. And because of when that was done and how it was sent, it was a little bit difficult to track down where those records were, although, you know, I think we helped NIOSH do that. And, you know, while there may be some pockets or records were -- were (indiscernible), I certainly can't rule that out. I do know that, you know, NIOSH is with -- with the help of my office, has searched a number of different places, Kansas City, Sandia, LM, maybe some others too, I'm not -- Los Alamos possibly, off the top of my head, I can't remember. But I -- I know we have worked to set them up with a few different places where they found Pinellas records.

MEMBER CLAWSON: And, you know, I'm not -- I'm not criticizing. I know that when Pinellas went down, that this was kind of one of the first ones in the program that kind of shut down like this, and I understand that. But the part of what I'm trying to get to, too, is every one of these sites had some classification issues. And to me, that's one of our biggest things is trying to find some of these classified documents to be able to explain a little bit more of their process and so forth. I know that I've reviewed some at Sandia, I've I -- I've looked at other ones, but it just kind of seems like they're a hodgepodge. And you'd never really know if you've got -- got everything that is out there. And I was just -- I was just wondering about that.

MR. LEWIS: Yeah, I mean, I think -- that yeah. I think you put it exactly right. I mean, it is a challenge, particularly, you know, because that was one of the early sites to break up. And I think we -- you know, while

we've done a lot of records, you know, yeah, could I say that we've -- we've located all of the places where Pinellas Plant records might be? No, you know, I certainly couldn't. There could very well be other -- other sources of records or -- you know, places. But to some extent that's -- unfortunately, the case within DOE, I mean, we do find, quote/unquote, new records -- or not new records but, you know, even this year, we've -- you know, our contacts out in the field have identified collections that, oh, this was labeled as something, but we actually got it in there and found that with a few of, you know, whatever. The second half of this box was actually something else. It could be useful. So, you know, all we can do, you know, on our end, or on my end now is we identify those collections. We absolutely bring them to the attention and NIOSH and the Board, and we do everything we can to find the right places for Pinellas records and everywhere else. But, you know, unfortunately, there is definitely no map to where, you know, every bit of Pinellas' records went, or there's no list that, you know, that -- that accounts for 100 percent. I mean, I certainly wish that were the case, but that is definitely not how it is.

MEMBER CLAWSON: Well, and I understand that, and I'm not trying to put you in a bad situation there. I'm just -- I'm trying to better understand what's going on. I greatly appreciate everything that you guys have done, the -- the outreach to a lot of these different sites and stuff like that, and especially with your classified material that we were able to work with. I greatly appreciate it. That made -- made the process a lot easier, especially with Pantex and some of the other sites and so forth like that. So, I do greatly appreciate it. I just -- you know, where there's -- where there's

a requests for a lot of this information, I'm glad to hear that when some of these things pop up that we -- we would grab them and make sure that everybody's aware of them and go from there. Thanks, Greg. I appreciate it.

CHAIR ANDERSON: Any other questions? Go ahead.

MEMBER POMPA: Yes, this is David Pompa, Greg. How you doing?

MR. LEWIS: Good. How are you? Hello.

MEMBER CLAWSON: You got to unmute, Dave.

MR. LEWIS: Yeah, it looks like you got muted.

MEMBER CLAWSON: There you go. Now you're muted again. One click. You're still muted.

MR. LEWIS: Well, if there's another question, if David could type his question into the chat, and I could do my best to answer it that way, too.

MEMBER CLAWSON: Well, this goes to show sometimes some of us are a little bit computer illiterate here and we have a problem. I know that I've talked a lot with my mute on. But Dave, can you -- can you help --

MR. LEWIS: Yeah, I've dropped off too. So, sometimes it's the -- the equipment is not -- not infallible either.

MEMBER CLAWSON: I relate to that.

CHAIR ANDERSON: Are there other questions and try to get Dave un -- unmuted? Okay, no other questions?

MR. LEWIS: Well, and for -- for David, you know, he can -- you-all know where to find me. I'd be happy to talk with him offline after the meeting. If there's a request or answer, if he has, you know, somebody wants to submit in writing, I mean, believe me, we're happy to answer any

questions you-all have, so.

CHAIR ANDERSON: Thank you very much, Greg.

MR. LEWIS: All right, thanks, folks.

CHAIR ANDERSON: Okay. We're not going to get Dave on here, so next up is a procedures review with Josie and Kathy.

PROCEDURES REVIEW FINALIZATION/DOCUMENT APPROVAL

MEMBER BEACH: All right. Thanks, Henry. I'll go ahead and just say a few things while Kathy gets the slides up.

CHAIR ANDERSON: I want to say are we gonna have a full 96 slides?

MEMBER BEACH: Yeah, there's actually 95, so not quite.

CHAIR ANDERSON: Okay.

MEMBER BEACH: There's -- we're -- we're do -- we're reviewing five sites.

CHAIR ANDERSON: Yeah, yeah.

MEMBER BEACH: We've been doing it for the past several meetings. The -- the advisor -- or the procedure subcommittee has approved these, and so we're trying to work through the backlog just as -- just as a side note, of old -- old cases, some of them are becoming more -- newer. And so that's what we're going to do again today, if you remember from December's meeting. And hopefully Kathy's on and can share her screen.

MS. BEHLING: Yes, I'm here, Josie. Do you hear me?

MEMBER BEACH: Yes, yes.

MS. BEHLING: Okay.

MEMBER BEACH: Hello.

MS. BEHLING: Hello. Whenever you're -- let's see here. Let me try to share my screen.

MEMBER BEACH: While Kathy's doing that. I'll just say, Henry, if we could, go through the questions after each one of these and then go ahead and do the vote like we did before. I think we just did an aye or nay, and we'll just move through each of these in -- as they come through.

MS. BEHLING: And are you seeing my screen?

MEMBER BEACH: No, we're seeing you.

MS. BEHLING: Okay.

MEMBER BEACH: Which is not bad.

MS. BEHLING: Well, let's see here. All right, there we go. Is -- let's see here.

CHAIR ANDERSON: Those who are on and are not muted, please mute, because I think that -- we have a pretty good-sized group, and that may impact our bandwidth on some of this so --

MEMBER BEACH: Yeah. And Henry, are you okay with as we go through these just taking the vote --

CHAIR ANDERSON: Yeah.

MEMBER BEACH: -- after each one? Okay.

CHAIR ANDERSON: Yeah, yeah.

MEMBER BEACH: Thank you.

MS. BEHLING: Are you seeing my screen now?

MEMBER BEACH: Yes, we are. Thank you.

MS. BEHLING: Very good. Let me do one more thing here. Let me see if I can -- hold on just a second. I'm going to this and present. How's

that? Still seeing my screen?

MEMBER BEACH: Yes, that's perfect. It's the full screen now.

MS. BEHLING: Okay, great. And you can hear me?

CHAIR ANDERSON: Yes.

MEMBER BEACH: Yes.

MS. BEHLING: Okay. First of all, the procedure -- yeah, procedures subcommittee has been working very hard, and so I'm here once again to share some of their progress. And today we're going to start by reviewing five PERs. And just for the benefit of the new members, let me explain the PER process. And PER stands for program evaluation reports.

And when changes are introduced into any NIOSH technical guidance document that results in an increase in dose, NIOSH issues a PER. And this document assesses the number of adjudicated cases with POCs of less than 50 percent that may be impacted by the increase in dose. And then NIOSH reworks those dose reconstructions for any of the impacted or affected cases.

So, today, we will be trying to work through five PERs that are listed here. And we're gonna start with PER-45, which represents a change to the Aliquippa Forge TBD. And the PER was issued in April of 2012 due to revisions in the technical basis document. And the TBD was revised because there was new data that was discovered, and also to incorporate revisions of OTIB-70. And OTIB-70 is the OTIB that is dose reconstruction during residual radioactive periods at atomic weapons employer facilities. And as a result of these changes, the external dose increased during most of the residual period. And although the internal dose decreased for most years,

there were a few years where doses increased.

For a little background of the history of operations at Aliquippa Forge, they produced uranium rods for uranium billets. And rolling operations began in January of 1947 through the end of February 1950. And the resid -- yeah, residual period began in March of 1950 through the end of December in 1987 and again in January of '89 through the -- December 31, of 1992.

Now, SC&A has a protocol for doing these PERs, and we submitted our review of PER-45 in August 2004. And I added a link to that document, because it is available on NIOSH website. SC&A identified eight findings and two observations as a result of this review. And all the findings and observations were discussed and closed at the May 16, 2016, subcommittee meeting.

Okay. As I said SC&A does have -- has established a protocol that was adopted and accepted by the Board many years ago. And we have four subtasks. And subtask one is the assessment of NIOSH's evaluation of issues prompting the PER, and their potential impact on dose reconstruction. And under this subtask, SC&A identified two observations while reviewing PER-45.

The first observation is NIOSH should rewrite -- rephrase the role of OTIB-70 in section two of PER-45. This was identified as an observation because the Aliquippa Forge -- Forge TBD was actually written before the issuance of OTIB-70, and so OTIB-70 really played no role in defining the estimated internal and external doses. So, it's really more accurate to say that it was the existence of OTIB-70 not the change in OTIB -- OTIB-70 that impacted the TBD.

And observation two is that SC&A had previously not reviewed any of the revisions of the Aliquippa Forge TBD, technical basis document. So, subtask two of our PER reviews is the assessment of NIOSH's methods for corrective actions. So, since NIOSH -- or since SC&A previously did review OTIB-70, which is incorporated into this TBD, that review was not necessary. However, since SC&A had not reviewed the TBD our subtask review included a focused review of that TBD, which assessed only the doses during the residual period because this PER only addresses residual period doses. And as a result of the review of the residual period doses, SC&A identified seven findings.

Finding one was the failure to account for previous decontamination and decommissioning DND efforts. NIOSH -- what had happened here is NIOSH did not consider that in 1988 contaminated material and equipment was removed from the site. And because of this, interim DND was not accounted for to -- the derived source turn depletion factor would underestimate years prior to 1988. So, find -- and that's finding two.

And finding three. SC&A's calculation of inhalation and ingestion intake rates were slightly lower than those that were derived by NIOSH.

Finding four NIOSH did not acknowledge a survey, an air sample survey, of 180 dpm per cubic meter that was 20-fold higher than the 8.94 DPM per cubic meter that they used, the value that was used by NIOSH.

Finding five. In addition to not acknowledging that much higher air sample, the method that NIOSH used to convert and measure an air concentration to a model value seemed illogical to us. The conversion used unsupported indoor deposition velocity and a resuspension factor.

So, finding six. In SC&A's assessment of OTIB-70, when AWN facilities continue to operate after the end of the AEC operations, OTIB-70 really recommends that the -- that you reassess or you determine if that resuspension factor of one times 10 to the minus six cube -- meters -- meters be -- be -- that may not be considered appropriate for that particular situation. Therefore, NIOSH should have performed a site-specific analysis of available survey data.

In finding seven, the use of an -- again, of a 1992 removable output contamination survey measurement, again, it postdates that 1988 interim DND effort and therefore underestimates the internal doses.

Now, moving on to subtask three, which evaluates the approach for identifying the number of dose reconstructions require -- you know, requiring re-evaluation of doses, SC&A had one finding under this subtask. The PER states that the revision to the Aliquippa Forge TBD was the result of revisions to OTIB-70; however, NIOSH did not follow the OTIB-70 guidelines or guidance. Namely, NIOSH should have used measured air concentrations and result -- revised source term depletion factor of 6.70 minus four per day to derive the inhalation and ingestion doses.

So, resolution of the PER-45 findings. NIOSH initially responded to SC&A's findings in January 2015. And then SC&A submitted its review of those responses in March 2015. And basically, NIOSH agreed with finding five, which was the inappropriate conversion of measured data to model data. And since most or all of the findings were tied to that finding five and these faulty assumptions, the subcommittee closed all findings at the May 2016 meeting because NIOSH did acknowledge that this was an error, and

they were going to revise -- revise this TBD.

Now, subtask four protocol, which is -- our subtask four is to conduct audits of a sample set of dose reconstructions impacted by the PER. We reworked one case. The case was selected based on the criteria that external and internal doses were assigned during the residual period. And SC&A submitted its review of the reworked case in December 2021.

And NIOSH reworked the case. And they -- when they reworked that case, they used all the currently available data and DR tools. They recalculate annual doses and they rerun IREP. There was no need to send a re-evaluated case to the Department of Labor since the compensation decision did not change in this case.

A little background about the PER-45 case. The EE worked for two brief employment periods during the residual period. The EE worked throughout the site, and there were no monitoring records found. And the EE was diagnosed with a qualifying cancer more than two decades after employment termination. This slide shows a comparison of the reworked doses to the original doses. And as shown, there was -- as shown there, there was two of -- almost two -- more than 200 percent increase in the external dose, no change in occupational -- occupational medical dose, and the remainder of the doses internal total and plus the POC decreased.

So, the original external dose calculations, they use values from revision 00, PC one, page change one of the TBD and the doses were prorated for partial years of employment. And although the original dose reconstruction report stated that they used a dose conversion factor that was based on thyroid as a surrogate origin, when we looked at the data, we

realized that they actually used a DCF value that was associated with the thymus. This -- because the thymus DCF value is higher than the thyroid, this actually was a claimant favorable and a little bit of an overestimated dose. Doses to all the cancer sites were about 300 millirem.

The reworked dose reconstruction. External values, they used TBD rev. 1, and the rework did not prorate for partial years of employment. They did use a DCF for the thyroid from implementation guide 001, which is our external dose reconstruction retention guide. And because the external doses increased between rev. 1 and rev. 0, the rework increased to greater than 1 rem.

So, SC&A review. SC&A's review determined that NIOSH used appropriate dose values from table 5-1 of TBD rev. 1, and based on the guidance in OTIB-0005, NIOSH selected the appropriate surrogate organ, and the appropriate DCF value was applied. Not prorating that dose for, like, termination a year -- at termination year of employment actually was done as an efficiency measure and is claimant favorable. Doses were -- we found doses to be accurately entered IREP. And as expected, the reworked external doses increased. So, SC&A had no findings or observations with the rework of the external dose.

Okay. (Indiscernible) a comparison of the original and reworked internal assumptions in dose. The internal dose -- for the internal dose, the original DR used rev. 00, PC 1, and the rework used rev. 1 of the TBD. Both the original and reworked used IMBA to compare types M and S solubility for uranium. And both concluded that type S resulted in the higher dose and (indiscernible). The original assigned -- the original DR assigned a dose of

about 2.2 rem while the reworked assigned a dose of 400 millirem. And as I initially said, it was stated that most of the internal doses did decrease, but in some cases in a few years, there was some increase in dose. So, this was expected.

Again, SC&A confirmed that rev. 1 intake values were correctly used in the chronic annual dose workbook, CADW. And SC&A verified that the type S solubility resulted in a higher dose, that the doses were appropriately entered into IREP, and that they were assessed to the date of cancer diagnosis, and therefore, we had no findings or observations with the internal dose.

So, that sums up PER-45. Do you have any questions? Do you (indiscernible).

MEMBER BEACH: Thanks, Kathy. I just wanted to mention your voice kind of gets a little garbley. I don't know if it's where you're sitting or just something to note.

And, Henry, did you want to take over as --

CHAIR ANDERSON: Sure.

MEMBER BEACH: Okay.

CHAIR ANDERSON: I want to ask, I mean, especially for the new Board Members, if you have questions, this is a pretty standard approach she used to go through this and how we do it. If you have questions, feel free to ask. Pretty much showed what are -- what the committee is proposing is that we accept the close out of this. Is that correct, Josie?

MEMBER BEACH: Yes, that's correct, Henry.

CHAIR ANDERSON: So, the way we're going to do it since we're not

here in person is rather than ask for a show of hands in favor, we'll say does anyone object to taking the recommendation and following that and recommending a closing of this review? And is there anybody who wants -- if there is anyone -- Jim?

MEMBER LOCKEY: Hello?

CHAIR ANDERSON: Yep. James, go ahead.

MEMBER LOCKEY: I'm for -- I approve.

CHAIR ANDERSON: Okay. I'm not gonna ask everybody to do that. I'm looking for those who don't approve then we can discuss that, or if there's anyone who wants to abstain from voting, you can do that as well. So, at this point, I don't think I've seen any -- no one seems to want to say they object to this. So, with that, the assumption is that we have approved it.

MEMBER BEACH: Okay, thank you. And Kathy, you're on to the next one. DCAS-PER-076.

MS. BEHLING: -- you don't hear me, please, stop me, and I'll try to speak up. Is it better now?

MEMBER BEACH: No, it was actually -- started being a little garbled right when you started speaking, so I'm not sure.

CHAIR ANDERSON: Do you have two --

MS. BEHLING: -- now?

CHAIR ANDERSON: Do you have two microphones on, your computer and another or not?

MS. BEHLING: No.

CHAIR ANDERSON: Okay.

MEMBER BEACH: Okay.

MS. BEHLING: -- okay now? You're hearing me okay?

MEMBER BEACH: Yeah.

MS. BEHLING: All right. I'll try to speak up. Okay. So, we're on to PER-70, which was also issued due to changes in the Aliquippa Forge TBD. And those changes were prompted by SC&A's review of PER-45 that we just discussed. So, rev. 2 of the TBD was issued in November of 2016, and PER-76 was issued in February of 2017. The -- the revision resulted in increases in internal and external doses, again, during the residual period. And since SC&A reviewed the residual period doses in the prior TBDs, the subcommittee determined that only a subtask four or case review was necessary.

So, again, subtask four is conducting an audit of a sample sets -- a set of impacted dose reconstructions. And under PER-76, NIOSH evaluated 21 cases. One reworked case was compensated, and the remaining cases were POCs of less than 45 percent. And as with PER-45, SC&A, recommended reviewing one or two cases with assigned external, you know, okay, and internal doses during the residual period. You still hearing me?

CHAIR ANDERSON: Yes.

MEMBER BEACH: Yeah, we are.

MS. BEHLING: Okay. SC&A submitted its review of the one case that met the selection criteria in April of 2018. The review was presented to the subcommittee at the February 13, 2019, meeting, and SC&A had no findings or observations. And I'll just make mention that typically, our subtask four reports are not posted on the website. It's because of the amount of

redaction that would be necessary in order to post them.

Okay. (Indiscernible) EE worked for two separate time frames at Aliquippa Forge during the residual period. This EE prob -- most likely worked primarily in one building on site. I -- as you know, (indiscernible) is to ensure that we don't say too much information. I'm very -- I'm really not giving a lot of details about these cases. There were no records of internal or external monitoring. And the EE was diagnosed with qualifying cancer several -- several decades after the employment termination. Here's our slide that shows, as expected, there was an increase in internal and external doses as well as the total dose and POC.

Okay. The original dose reconstruction was performed in 2008, and it used, again, revision 00, PC 1 of the TBD. The -- and it applies the DCF values from IG-001, the implementation guide, external implementation guide. And this resulted in a total external dose of less than one rem. And annual doses were entered into IREP with a log-normal distribution and a geometric standard deviation, a GSD, of 1.5.

The rework was performed in 2016 and that used, obviously, rev. 2 of the TBD. The rework applied to DCF values again from IG-001. This resulted in a total dose of greater than 4 rem. And as we discussed under PER-45, the external dose increased significantly due to revising that starting air concentration value which was increased by about a factor of 42 between rev. 1 and rev. 2. The rework entered annual doses into IREP as constant values.

For internal dose, NIOSH used the intake value of 3.4 picocuries per day for inhalation and 0.071 picocuries per day for ingestion. That comes

from rev. 00, PC 1 (indiscernible) used to compare solubility types M and S with M resulting in the higher dose. And the dose -- this resulted in assigning a dose of less than 10 millirem. And annual doses were entered again as a log-normal distribution, but with a GSD of 3.

(Indiscernible) they used the revised inhalation and ingested values for rev. 2 of the TBD. And the inhalation values were entered into the CADW program assuming type M solubility. Ingestion values were entered as maximum values, which is f(1) values, which assesses the absorption and selects the highest for each -- selects the highest absorption type for each entry. And this resulted in a total dose of less than 100 millirem. Again, for the rework, NIOSH entered the doses into IREP as constant values.

SC&A found that NIOSH used correct doses for rev. 2 of the TBD and appropriate at anterior-posterior DCF values from IG 001.

For internal dose, SC&A verified that the inhalation and ingestion intakes for rev. 2 of the TBD were correctly entered into CADW. We also confirmed that type M insolubility resulted in a higher dose and that dose -- the doses were entered properly into IREP as constant distributions. So, there were no findings or observations regarding the rework of PER-76 case.

MEMBER BEACH: Thanks again, Kathy. Good reporting. Any questions?

CHAIR ANDERSON: Once again, it's encouraging to see that there's agreement that the reworks are all working out. So, we're accomplishing what these reviews were set up to do. It's a lot of work, but I think it gives a lot of the confidence in the changes and that they were implemented and done. So, any questions people have? If not, again, I'll ask for a vote on

accepting the review as done by the committee. Are any opposed to approving? And any abstainers? Seeing none in either category, the recommendation has been adopted.

MEMBER BEACH: Thanks, Henry. And we're on to the next one. Thank you, Kathy.

MS. BEHLING: (Indiscernible) 95 we'll get there.

MEMBER BEACH: Yes.

MS. BEHLING: Okay. All right. Yeah, I started out with the easy ones though. Okay. PER-77 was issued in February of 2017, again due to changes to a TBD. In this case, it's the Simonds Saw and Steel TBD. Key revisions included for the operational period external and internal intakes should be based on the 95th percentile doses for operators and the 50th percentile for administrative workers. And for the residual period, exposure time was increased from 2000 hours to 2500 hours per year. And since S&CA had previously reviewed the dose reconstruction methodology in the TBD and the PERS as to all of the adjudicated cases and were less than 50 percent, SC&A was tasked only to perform a case review.

So, to give you just an overview of the Simonds Saw and Steel operational history, the facility was involved in rolling natural uranium as well as some depleted and enriched uranium and thorium rods. The operational period began February 24, 1948, and ended at the end of December 1957. So, the residual period starts in January of 1958, January 1, until the present time.

For PER-77, NIOSH evaluated 105 cases, 27 resulted in a POC that was greater than 50 percent, they were compensated, and 78 cases, the

POCs were in less than 45 percent.

SC&A had recommended selected cases based on three selection criteria. First, either an operator or a production worker who worked during the operations and residual periods and was not monitored for internal or external exposure or was partially monitored for external exposure. The second criteria was an administrative worker employed during the operational period. And the third criteria we asked for at least one case for employment during the entire year of 1948.

SC&A submitted its subtask four review in June of 2018. The review was presented to the subcommittee at the February 13, 2019, meeting. NIOSH identified one case that met criteria one and three for the operational worker; however, there were no cases available for the administrative worker. So, the case that was reviewed, the EE worked for approximately three decades at Simonds Saw. Obviously, the EE was an operator for a specific trade that is not being named. Obviously, due to (indiscernible) concerns. The EE was diagnosed with a qualifying cancer after termination of employment.

Again, a comparison table, and due to the TBD revisions, all categories of doses and POCs -- POC increased, as shown on this slide.

So, the original dose reconstruction was performed in 2005. And since the EE was not monitored for external exposure, medium doses and associated geometric standard deviations were used from applicable tables in rev. 00, PC 1 of the TBD. There's one table that lists all of those for the operation and one for the residual period.

Doses were assessed for four exposure scenarios. And those exposure

scenarios included ambient contamination submersion during operations, uranium billets during operational rolling, uranium rods during operational rolling, and post operational residual contamination. Maximum -- they used a maximum exposure to organ DCF value from IG-001. And this assumed that there was an isotropic geometry for the submersion in ambient contamination, and it assumed an A-P geometry for the operational rolling and residual contamination.

So, for the original external dose, this resulted in the calculation of a total dose of more than 10 rem. The rework was performed in 2017. And again, the EE was classified as an operational worker, and was therefore assigned the 95th percentile dose from rev. 2 of the TBD. The residual dose of 200 millirem annually was assigned based on table 5-2 of rev. 2 of the TBD, and this resulted in a reworked total external dose of more than 69 rem.

So, this -- this slide just gives you some notable differences between the original and the reworked external doses. As I said, the operational dose was a medium -- a medium dose rate for the original versus the 95th percentile dose rate and the reworked 2000 hours per year was assumed with a GSD of 3.5 for the original versus 2500 hours per year which was entered as a constant into IREP. For the original the ISO geometry DCF was used for the submersion during operations and maximum external to organ DCF was used for all other exposure scenarios. Where the -- the reworked use the A-P geometry for all exposure scenarios and used that midpoint value as opposed to a maximum value.

For the original, there was no prorating for the terminator year while

the rework did prorate for -- for the partial year of exposure or of employment

and exposure.

(Indiscernible) TBD rev. 2 dosing was used and the TBD rev. 2 was followed. We also verified that the IREP inputs were correct. And based on this review, SC&A had no findings or observations regarding the calculation of external dose.

And I have to apologize here because this slide is actually showing. It was a duplicate of the reworked information; however, if you just bear with me, I'll talk you through what the actual dose in assess -- in assessing the original external dose was. And I apologize that this got duplicated. But for the original internal dose for PER-77, the EE was not monitored for internal exposure and therefore, NIOSH used intake values absorption types and the associated GSDs from table 15 for the operational period and table 20 for the residual period from rev. 00, PC 1 of the TBD. The exposure to uranium via inhalation was assigned for each year of covered employment. Did no prorating for the termination year. The inhalation exposure to recycled uranium contaminates, which included neptunium and plutonium, was also assumed during the operational period. And since source term relied on air -- air sampling measurements rather than bioassay, inhalation and ingestion intakes of -- for Thorium-232 and Thorium-228 were also assessed. And this resulted in a total internal dose of 500 millirem for the original internal dose.

So, now we'll go on to the rework, which is exactly what you've been looking at here. For the reworked, NIOSH used rev. 2 TBD and took intake

values, absorption types, and associated G -- GDS from table 3-13 for the operational period and 5-1 for the residual period. Since the EE was considered a production worker or operational worker, the 95th percentile intakes were used, and the doses were prorated for the year of employment termination.

Exposure to the recycled content -- recycled uranium contaminates was expanded in this rev. of the TBD to include Tech-99, as well as Neptunium-237 and Plutonium-238 during the operational period. Due to the SEC only thorium exposure was assessed during the residual period and also thorium dog -- daughter products that are listed in the second to last bullet are also included in this assessment. And this resulted in a total internal dose of approximately 800 millirem.

So, as a means of valuating NIOSH's doses, SC&A calculated internal doses using intake rates in rev. 2 of the TBD, and our doses were actually within 2 percent of NIOSH's doses, which is considered a reasonable degree of accuracy, and therefore NIOSH -- or SC&A had no findings or observations with NIOSH's reworked internal dose.

And that concludes PER-77.

CHAIR ANDERSON: Thanks. Any questions? It really -- this case documents --

MEMBER ZIEMER: This is Ziemer. I have one question or clarification, if I could.

CHAIR ANDERSON: Go ahead.

MEMBER ZIEMER: Kathy, just for, maybe, purposes of making sure that what you said orally or what will appear on the transcript agrees with

the slides, could you go back to slide 42 just briefly. In the first bullet, you referred to the residual period and talked about table 20, and the slide says table 5-1. I think 5-1 probably is correct, but I want to make sure that the transcript agrees -- will agree with that. Did I understand that -- you to say table 20 there? Am I -- am I the only one that heard that wrong?

MS. BEHLING: The problem with page 42 is that inadvertently all of the data that was supposed to be for the revised internal dose got take -- got cut and pasted into the original internal dose. All of these bullets are incorrect. And I read you -- I can update this with the correct data in it, but I just read to you -- it's actually -- the original internal dose used rev. 00, PC 1, which is -- is correct up to that point in time, but everything else is incorrect on this slide. And it used table 15 for the operational period and it used intake values and absorption time from table 20 for the --

MEMBER ZIEMER: And so -- so, table 20 is the right thing; the slide is wrong?

MS. BEHLING: That is correct.

MEMBER ZIEMER: -- said that. Gotcha.

MS. BEHLING: That is correct, and I apologize for that.

MEMBER ZIEMER: Oh, no. I just want to -- I just wanted to make sure I was understanding that correctly. Thank you.

MS. BEHLING: If you would like, I can issue a revised presentation if that will help. That's probably, maybe, a good idea.

Rashaun, would you like us to do that?

MEMBER ZIEMER: I'll leave that to -- to Josie, our chair, but I just want this for clarification here.

MEMBER BEACH: Kathy, this is Josie. Can you just do the one slide or would you need to redo the whole -- the whole 95 present -- page presentation.

MS. BEHLING: Well, what we can do is just insert the appropriate slide --

MEMBER BEACH: Okay.

MS. BEHLING: -- into this. And I don't know how that happened. Somewhere between transferring and editing and transferring things back and forth, but I could just be introduced the correct slide into -- right here into page 42.

MEMBER BEACH: Okay. Yeah, I think that's probably a good idea just for clarity's sake.

MS. BEHLING: Yeah, I --

DR. ROBERTS: Kathy, that sounds fine.

MS. BEHLING: Okay, thank --

MEMBER VALERIO: Kathy? Kathy, this is Loretta. I have a question on a clarification as well, but it's on page -- on slide 43. So, on the -- let me see if this is the right one, because I thought that you had said that the inhalation for the plutonium was P-237 and 238, but I'm seeing 239. Am I missing something? Am I on the wrong slide? You may go back to 42 for me.

MS. BEHLING: Actually, --

MEMBER BEACH: Yeah, that -- I think you're on the right slide. That is listed in the fourth bullet.

MEMBER VALERIO: So, I've got just a clarification as well.

MS. BEHLING: (Indiscernible) --

MEMBER BEACH: Kathy, we can't hear you.

MS. BEHLING: (Indiscernible) --

MEMBER BEACH: Kathy, we can hear that you're speaking, but it's not coming through very clearly.

MS. BEHLING: (Indiscernible) -- can you hear me now? (Indiscernible) not hear (indiscernible) --

MEMBER BEACH: I don't know if anybody else -- I can't hear you.

MEMBER ZIEMER: No, I can't hear.

MEMBER VALERIO: No.

MEMBER KOTELCHUCK: I can't hear.

MS. BEHLING: (Indiscernible) hold on just a second.

MEMBER BEACH: Yeah, Kathy, this is Josie. I'm not sure what's happening, but we can hear that you are speaking, but we just can't I can't hear what you're saying.

CHAIR ANDERSON: No.

MS. BEHLING: Can you hear me now?

MEMBER KOTELCHUCK: Yes, yes.

MS. BEHLING: Okay. I'm gonna be -- I'm getting a back -- you know, so I don't -- I'm trying to mute myself on here.

CHAIR ANDERSON: We hear you on your phone.

MS. BEHLING: Okay, let's just move on.

CHAIR ANDERSON: (Indiscernible) --

MS. BEHLING: I hear some echo, but I'll try to move through this.

MEMBER BEACH: Yeah, we can't --

MEMBER ZIEMER: We're hearing the echo, too.

MEMBER BEACH: Yeah.

MS. BEHLING: You are.

MEMBER BEACH: So, did you have an answer for Loretta's question on slide 43 or did you --

MS. BEHLING: Actually, I think that she may be referring to -- that I mentioned under the original Thorium-232 and Thorium-228 -- 232 and 228 or were assessed as part of the air sampling measurements because of -- there was -- it was air sampling measurements rather than bioassay. And I mentioned that on the original internal dose. So, I'm not sure if I answered that question.

MEMBER VALERIO: So, Kathy, this is Loretta. And -- and you know, it was fading in and out, so I may have misheard, but I thought I had pu-237 and 238. So, if anyone else heard that -- if not, my mistake in my apologies.

MS. BEHLING: And maybe I misspoke.

Are you hearing me now?

MEMBER VALERIO: I hear you much better now. Thank you.

MS. BEHLING: Okay, great. I just turned something off on my computer that I -- I got rid of the echo. Is anyone else still hearing the echo?

MEMBER BEACH: No, I'm not.

MS. BEHLING: Okay, great.

MEMBER BEACH: Thank you.

MEMBER KOTELCHUCK: Loud and clear.

MS. BEHLING: And I apologize if I confused someone here or misspoke. And I think perhaps once I -- if I enter the right information for the original internal dose, maybe it will eliminate some of this confusion. I apologize.

MEMBER BEACH: Okay, thank you.

And Henry back to you.

CHAIR ANDERSON: Okay. This was complex, and it appears that it -- the recalculation was done correctly made a fair amount of difference. So, with that, we'll do another vote on the committee recommendation to adopt the recommendation accepting this review. And all those who are against adoption, speak up or if you want to not be -- not -- not comment at all. So not seeing anybody abstaining or objecting, the recommendation of the committee is accepted.

MEMBER BEACH: Okay, thank you. We'll move along.

MS. BEHLING: Okay. And everyone's hearing me still?

CHAIR ANDERSON: Yes.

MEMBER KOTELCHUCK: Yes.

MS. BEHLING: Okay, thank you. Okay. On to PER-43. PER-43, the title is internal dosimetry organ, external dosimetry organ, and IREP model selection by ICD-9 code revision, and this is actually the title of OTIB-5. The PER was issued in June of 2013. OTIB-5 was initially issued in March of 2003, and there were nine revisions prior to issuing PER-43. This -- throughout the years, there were many changes. But for this PER we're really only concerned with those changes, as I had mentioned earlier, that have the potential to increase dose.

So, on this next slide -- I know it's a bit busy -- but I did want to provide a little bit of a summary of those changes that have the potential to increase dose. Revision 01, PC 1, it added a bone cancer model. Revision 1, PC 2 change the designated internal organ for several of the ICD codes from lung to medical review, and the external organ for prostate was changed from testes to bladder. Revision 3, it modified adenoid carcinoma of the third -- lower third of the esophagus and required modeling of the esophagus and the stomach to determine which was higher. Revision 3 changed the internal organ for ICD-9 code 155.1 from gallbladder to liver/gallbladder. And for ICD-9 codes 238 and 239.2, the internal organ change from medical review to bone surface, and the external organ changed from red bone marrow to bone surface. Then lastly, rev. 5 added code 204.1 for chronic lymphocytic leukemia, CLL.

Okay. SC&A's subtasks one through three review was submitted in August of 2014, and it is available on the website, and there were no findings or observations. This review was presented to the subcommittee at the August 28, 2014, meeting. The subtask four review was submitted in December of 2014 and that, for this particular PER, is published on the website. It has three findings. And the review was presented to the subcommittee at the February 18, 2015, meeting, and during that meeting, the findings were closed.

So, subtask one assessed the issues that prompted the PER. And for this PER, SC&A reviewed rev. 5 of OTIB-5 to -- to assess the sub -- this subtask. And basically, what OTIB-5 is saying is that the coding of cancers is conducted by the Department of Labor on the basis of ICD-9. We've now

moved to ICD-10. But in that -- section 4.2 of OTIB-5 states that in some cases, a medical review is performed by an Oak Ridge Associated University Team physician and it's necessary -- when it's necessary to determine if an organ or tissue is supposed to be used in IMBA. So, considering that, SC&A concluded that since OTIB-5 revisions were introduced by parties that are typically outside the scope of our review, we assume that these changes and additions were necessary and that they improve the understanding of the X in target organs in OTIB-5, therefore, SC&A accepts these changes and has no subtask 1 findings or observations.

In assessing NIOSH's method for corrective action, SC&A reviewed all of the PER-43 stated revisions and compared them to the text and to the table 3.1, which contains a list of organs and tissues and IREP models for internal and external dose in OTIB-5, and we were able to confirm that everything they identified there were -- were changed during the appropriate or during -- during the listed revisions. And based -- so, based on that comparison, SC&A had no findings or observations under subtask 2.

Under subtask 3, SC&A evaluated NIOSH's approach for identifying the number of cases requiring reevaluate -- reevaluation. NIOSH determined the population of potentially affected cases by identifying first cases completed before the issue date of these specific revisions which has the potential for increasing dose, which I've mentioned in the previous slides, cases with derived POCs of less than 50 percent, and cases that met one or more of the changes identified in PER-43. This resulted in the identification of 36 cases. For two cases, the rework resulted in a POC of greater than 50 percent, and for the remaining cases POC with less than 45 percent. So,

two cases were compensated, and the remainder were not.

SC&A was not given access to all of the primary data to identify and quantify the cases; however, our -- so, our evaluation was really limited to the methodology that NIOSH used to identify these cases or the potentially impacted cases. And SC&A concluded that, based on the screening criteria provided in PER-43, that screening criteria was scientifically sound. So, we had no findings or observations under subtask 3.

In order to perform subtask 4, SC&A as part of their subtask 1, 2, 3 report, we recommend selection criteria. And for PER-43, we recommend one case of the four that were impacted by changes to the ICD code 150 that was introduced in rev. 2 of TBD -- of -- I'm sorry, of OTIB-5 that we -- we -- we recommended that we look at one -- one of those four cases. We will also recommend looking at one case affected by the changes to ICD-9 code 155.1 that was introduced in rev. 3. We wanted to look at one case where the basal carcinoma was considered under code 232 in revision four and one case reevaluated due to changes in the target organ for ICD-9 code 238.

And SC&A subtask 4 review, NIOSH identified four cases. The case reviews resulted in two findings from case A, there were no findings in cases B and D, and there was one finding in C, which I'll discuss.

Case A background. The EE -- and I'm not going to even specify the facility here. The EE did work at a DOE facility for more than two decades. The original dose reconstruction did not include a cancer that was discussed in the PER-43; however, thereafter, a second cancer was diagnosed, and that was assigned an ICD code of 238 and it -- which was impacted by PER-

43. In this case, the internal dose changed from medical review to bone surface.

And here is the comparison of the original -- the reworked and the original doses for case A. And the table shows that there were -- there were obviously two cancers, and cancer two is the one we're concerned about, and that for cancer two, all doses increased and when combined with cancer one, the POC also increased. After reviewing all the data associated with this case, SC&A concluded that the second cancer should not really have been assigned a code of 238. It should have been considered a metastatic cancer. Therefore, that second cancer should have been assigned the same ICD -- ICD-9 code as the primary cancer. And so, because of this, we identified two findings.

And finding one, again, failure to revise -- to revise ICD-9 code 238 to that of the primary cancer. Had this cancer been considered a metastatic cancer, it would not have been even required to reevaluate this case and NIOSH agreed. However, it was determined that the error was really committed by the Department of Labor, and it did not impact the compensation decision. And so -- and also, it doesn't appear to be a systemic issue, therefore, the subcommittee closed this finding.

Finding two is tied to finding one and states that, you know, as a metastatic cancer for which the primary cancer was identified, there was neither a need to assess the dose of the metastatic cancer nor include the dose in the calculation of the POC, which I (indiscernible) for, and NIOSH's response was the same as for finding one, so the subcommittee closed this finding.

And on to the second case reviewed under PER-43, case B. The EE worked at DOE site for two distinct time periods. The EE was diagnosed with a cancer that was associated with ICD-9 150.5. The original dose reconstruction use the distal estoppel -- esophageal tissue to calculate doses, and in the reworked dose reconstruction, NIOSH used the stomach as the organ of concern for calculating external and internal doses, and that was based on revision 2 of OTIB-5. And S&CA had no findings or observations with rework of case B, but -- and I will provide an overview of the dose calculations in the next slide.

Okay. Again, here is a comparison of the reworked and the original doses. Only the internal dose increased, as shown on this slide. The differences between the original and reworked external dose include, as I mentioned, the original use the esophagus as the external dose of interest and the rework used the stomach. Both use the external dose data workbook, but it was updated, we thought, by the time the rework was done. The original also assigned some dose to less than three keV to account for, perhaps, plutonium exposure, but in the rework, the rework considered that it was unlikely based on the EE's job category that the EE was actually exposed to plutonium. Therefore, the rework assigned all of the photon dose to the 30 to 250 keV range. This resulted in the original dose reconstruction calculating a dose of nearly three rems, and for the rework, the dose was less than 2 rem.

Okay. For internal dose, differences included, again, the selection of the organ of interest, the original calculated environmental internal dose. However, the rework actually used OTIB-18. And OTIB-18 is -- the title of

OTIB-18 is internal dose overestimates for facilities with air sampling programs. And this is an OTIB that is used pretty much as an efficiency measure, and it's a very conservative overestimating OTIB. And so, by using that they didn't have to consider the environmental dose. The original DR calculated dose of less than 500 millirem for internal while the rework calculated dose -- internal doses of greater than 1.5 rem.

So, as discussed in our -- our review comparing the original and reworked approaches and external and internal dose calculations and based on the EE's job title, SC&A agrees with NIOSH's assumptions regarding plutonium exposure and that it's likely he was not exposed to plutonium. We consider that the rework used OTIB-18 for calculating the internal doses, which is likely an overestimate, and therefore, SC&A had no findings or observations with the internal dose.

Case C is another DOE employee. The EE only had a brief employment at a DOE site. EE was diagnosed with the cancer, assigned an ICD code of 155.1 after the employment termination. And the change in code 155.1 was introduced into OTIB-5, rev. 3, and it involved the external organ being changed from the bladder to the liver, and the internal organ was changed from the gallbladder to the liver/gallbladder.

Comparison of doses for case C is shown in this slide, and you can see a significant increase in the internal dose and hence an increase in the total dose and the POC. We're calculating the external dose here. This slide shows you a comparison. Again, the original used the bladder as a surrogate organ while the rework used the liver as specified in the OTIB-5 revision. The original applied a claimant favorable DCF of 1. And since the

original used a DCF of 1, the rework did the same just for claimant favorability, and therefore, both the original and rework assigned the same doses, which resulted in greater than 3 rem.

For internal dose, again, as specified in the revision 2, OTIB-5, the original use the gallbladder as the internal dose of interest while the rework used the liver. Because of that change, the dose changed from less than 500 millirem for the original to more than 5 rem for the rework. And SC&A's review questioned NIOSH's choice of a surrogate organ. The reason for the question stems from the fact that the organ of interest actually has three locations where the cancer could arise. And so therefore, based upon statements in rev. 5 of OTIB-5, it says that if the description is unclear, a medical review should be conducted to determine the appropriate internal organ of interest. Since the EE records did not contain a medical review, SC&A identified this as finding three. Again, SC&A's finding is that in the absence of a medical review that would identify the cancer as extrahepatic, NIOSH's selection -- selection of the liver is inappropriate. And NIOSH's response was that the P -- that during the PER process, if you can complete dose reconstruction with the available data and the POC is still below 50 percent, there is really no need to stop that process and to get a medical review. And the subcommittee agreed with NIOSH's response and closed this finding.

And last for this PER, case D. This case represented an atomic weapons employer worker with a brief employment period. The EE's cancer was assigned an ICD code 232.6 and guidance in OTIB-5 prior to rev. 4 recommended comparing doses -- dose calculations assuming a malignant

melanoma and a nonmelanoma squamous cell carcinoma. And compare those two doses and select the higher dose. And rev. 4 actually introduced another comparison, and they added the basal cell carcinoma as a third option for a comparison and to calculate doses for all three and determine which is the highest.

So, the original dose reconstruction calculated doses for the malignant melanoma and therefore the reworked calculated doses assuming a nonmelanoma basal cell carcinoma. In comparing the original malignant melanoma dose to the nonmelanoma BCC, basal cell carcinoma, dose, NIOSH determined that the original malignant melanoma dose produced the higher dose and the higher POC.

So, SC&A's review confirmed -- assessment confirmed that based on NIOSH's rework, the malignant melanoma dose and POC were higher; however, we didn't -- we couldn't determine if NIOSH actually assessed the nonmelanoma squamous cell carcinoma, so we performed that assessment independently and real -- realized that that actually resulted in the lowest of the three doses. So based on that assessment and with that knowledge, SC&A had no finding or observation with the rework of case D.

And that summarizes PER-43.

MEMBER BEACH: Okay. That was a long one. A little more complicated.

CHAIR ANDERSON: Just -- just a quick question. How did you end up with four cases to review for this one?

MS. BEHLING: It was because of the selection criteria that we -- we asked for. Because there were so many revisions too, as I said, initially

there were nine revisions to OTIB-5. That was what prompted PER-43. And each revision, we only looked at where doses had the potential to increase. And because there were -- there were increases and various changes in either internal or external organs that were selected between the various revisions and because those were associated with different ICD-9 codes, that's why we needed to look at four different cases.

CHAIR ANDERSON: Great, thank you.

MS. BEHLING: So, we -- we could capture all of the --

CHAIR ANDERSON: All the changes.

MS. BEHLING: -- changes to all four.

CHAIR ANDERSON: As well as changes over time, so.

MS. BEHLING: Yes, yes.

CHAIR ANDERSON: Complex set of cases to find.

MS. BEHLING: Yes.

CHAIR ANDERSON: Any questions Board Members have?

MEMBER ZIEMER: Andy, I have a question.

CHAIR ANDERSON: Yeah.

MEMBER ZIEMER: This is Ziemer. And actually, this is a question I shouldn't have to ask. It's based on my poor memory, because I'm on the subcommittee, but I can't recall, Kathy, on case C where they lack the medical review to establish the origin of the cancer, why was it okay just to go ahead with the calculation for the liver? Did they also calculate other -- the other quotations and determine the liver was the maximum? I just don't recall that, or maybe, Josie, maybe you remember.

MEMBER BEACH: Go ahead.

MS. BEHLING: In -- in the liver, and I think it's liver for this -- there are actually three general locations --

MEMBER ZIEMER: Right.

MS. BEHLING: -- in the liver that -- where that cancer could arise. And based -- so that's why SC&A said you really need to have a medical review to determine if it should be assigned liver as -- as the surrogate organ -- or as the organ. And had it not been in one specific location, they would not -- I don't think they would have even had to do a dose reconstruction. They wouldn't have to re-evaluate this case. So that's why we questioned whether they should -- because it could have been unclear that they should have had a medical review. But since they did go ahead and calculate it for that organ and it was still less than 50 percent, they -- they didn't go ahead and get the medical review.

MEMBER ZIEMER: All three locations were within the lever? Was that the case? That's unclear to me.

MS. BEHLING: Yes. I have to actually -- let me look at something here.

MEMBER BEACH: Just --

MS. BEHLING: If I can open this up.

MEMBER ZIEMER: Josie, do you recall that one?

MEMBER BEACH: Not off the top of my head, I sure don't.

MEMBER ZIEMER: Okay.

MS. BEHLING: Okay. This is --

MEMBER ZIEMER: Normal -- normally, if it's three different locations, that is -- I -- figuring out what to use for prostate, for example, you can

always do all three and select the -- the greater of the three, the greatest of the three.

MS. BEHLING: Yeah, he --

DR. TAULBEE: That's what I believe is --

MEMBER ZIEMER: Tim Taulbee, do you remember? Can you help us on this?

DR. TAULBEE: This is Tim. I wasn't there as part of this one, and I don't --

MEMBER ZIEMER: No, I know. I understand.

DR. TAULBEE: -- specifics here. But generally, what ends up happening here is that the liver results in the highest dose and the highest POC when we're doing these dose reconstructions. So, based upon what I was able to review in preparation here, that's what it appears happened in this case is that yes, we could have gone and done a more detailed medical review to find exactly --

MEMBER ZIEMER: The liver's --

DR. TAULBEE: -- where, --

MEMBER ZIEMER: -- greater, I guess.

DR. TAULBEE: -- but the liver is going to be greater, and we still resulted in a POC less than 50 percent. So, we didn't need -- we didn't feel the need to go through that medical review.

MEMBER ZIEMER: That was -- that was the thinking there. Once you've -- once you decided it was the liver, that's going to be the driving force.

DR. TAULBEE: That's correct.

MEMBER ZIEMER: Thank you. I just -- I just wasn't clear.

CHAIR ANDERSON: Any other questions?

MS. BEHLING: Yeah. And I was gonna say, yeah, that is correct. It is three different locations -- areas within the liver, and that particular report is published online. So, you -- I don't want to give out too much information. But you can go and look. In fact, I'm looking in our report, it's our PER subtask 4 report, page 19, and that will give you a more detailed explanation.

CHAIR ANDERSON: Any -- any other questions? This one really covered a lengthy period of time with all of the revisions. I bet it burned out as appropriate as possible.

MS. BEHLING: Now -- now --

CHAIR ANDERSON: Okay. Go ahead.

MS. BEHLING: No, I was just gonna say now the ICD-9 codes have been replaced the ICD-10 codes, and they're even more complex.

CHAIR ANDERSON: Yeah, right. We don't need to go there quite yet.

MEMBER BEACH: No, no.

CHAIR ANDERSON: But we'll see. So, again, we're going to vote on this recommendation. Do we accept the recommendations of the committee and close a PER-043 review of the four cases specifically? Anyone objects to accepting the recommendation and closure or wishes to abstain, speak up and we'll record your objection. Not seeing any hands go up, that means we have accepted the committee's recommendation to close PER-043.

MEMBER BEACH: Okay, thank you, Henry.

And Kathy, we're a little behind schedule, but I know we're on the last

one. So, Rashaun, do you want us to just keep going?

CHAIR ANDERSON: Yeah, we're --

DR. ROBERTS: (Indiscernible) --

CHAIR ANDERSON: -- break, so unless you -- anyone has a vital need for a break if you didn't do it while we were going over this last one, go do it. So, let's keep going.

MEMBER BEACH: Okay, thank you.

MS. BEHLING: Okay. All right. Yes, this is the last one. This is PER-59, which was issued in April of 2015. And this was issued due to changes that were introduced into the Norton Company template. And let me explain. For some facilities, NIOSH has not developed a technical basis document, you know, or a site profile that specifies the dose reconstruction methodology for the site. Instead, they append applicable dose reconstruction methodology into the dose reconstruction report, and we have adopted this term "template" because they generate this template, and it's very specific, sometimes for specific cases, for some specific groups of people. In addition, they have developed -- it's a pretty much nonpublished general guidance document for the site. These are for usually smaller-type sites. But it comes to our attention when there's a change and then a PER is issued, such as for the Norton Company. And the revisions to the template included a second SEC class core -- that corresponds to a portion of the residual period, namely January 1, 1958, through October 10, 1962. And it incorporated, again, OTIB-70 rev. 1 guidance, which lowered the depletion rate to .067 percent per day for the residual contamination starting in October of 1960 through -- 2 -- through two 2009.

So, the Norton facility worked with thorium and uranium, and the operational period was between 1945 and 1957. And the residual period started in '58 through October of 2009. And as previously stated, there is no technical basis document and the DR methodology is incorporated into a dose reconstruction template.

SC&A' subtask one through three report was submitted in May of 2017. There were three findings. Those findings were discussed and closed at the October 31, 2018, subcommittee meeting. And the subtask four case review report was issued in December of 2021, and there were no findings or observations with the case review. And that review was discussed at the May 25, 2022, procedures subcommittee meeting.

For subtask one, SC&A agrees that the addition of the SEC class and the adoption of the reduced residual period completion rates from OTIB-70 was justification for revising the Norton Company template and re-evaluating potential dose reconstructions. So, NIOSH -- so, SC&A had no findings or observations under subtask one.

For subtask two, SC&A reviewed OTIB-70 previously and performed a focus review of the SEC evaluation report, which prompted PER-59. However, SC&A had not reviewed the Norton template. Therefore, as part of our subtask two review, we included an assessment of the internal and external dose reconstruction methodology. And that review identified three findings.

For finding one, it states that the template doesn't include enough information to allow us to duplicate or confirm the methodology to calculate the external deep and shallow dose, and NIOSH responded by stating that

that methodology was actually extracted from the SEC ER and -- which SC&A had reviewed. This prompted the subcommittee to task SC&A with ensuring that that review was performed and that we did agree with the models used. SC&A followed through and confirmed that the methodology was approved, and the subcommittee thereafter closed this finding.

Finding two. In estimating air concentrations and the starting residual surface contamination levels, NIOSH used five of nine air -- air dust survey measurements that were actually dated between 1958 through 1968, which is after the operational period which ended in 1957. So, NIOSH agreed, and they indicated that they would change the template. In addition, during these -- our discussions, NIOSH questioned whether this issue should be a finding or reduced to an observation, and the subcommittee determined that it would be reduced to an observation, and they put the issue in abeyance awaiting NIOSH's change to the template. Thereafter, NIOSH did report that they revised the template, and the subcommittee closed the observation. And I have -- should put observation rather than finding.

Finding three, although SC&A could duplicate NIOSH's 1962 to 1963 air concentrations for intakes of thorium, we were not able to match uranium values. And actually, SC&A's values were about a factor or two lower. And NIOSH agreed that the uranium intakes were in error, and they stated again that they would make a change to the template. During that meeting, the subcommittee changed the finding to an -- to in abeyance awaiting NIOSH's as revision. And then in October of 2018, NIOSH reported that the template had been revised, and so the subcommittee closed the finding.

So, for identifying a number of cases potentially requiring a -- requiring a revised dose reconstruction, NIOSH initially identified 54 adjudicated cases with values of less than 50 percent. Nine of the 54 were employed -- had employed periods prior to 1962 and were not impacted by PER-59. Two additional claims were removed because one had been completed prior to the revision of the template, and the other was -- had been returned by DOE and was previously evaluated by NIOSH. The remaining 43 claims were reevaluated, and all the reworks resulted in a POC of less than 45 percent. So, SC&A agreed with NIOSH's selection criteria, and there were no observations or findings under subtask 3.

For selecting cases to review under our subtask 4 protocol, SC&A recommended cases where the EE was assigned an external dose as well as internal dose from exposure to uranium, thorium, and thoron. And the EE should have employment during the residual period starting in 1962. One case was selected which met all of the recommended criteria, and SC&A's subtask four report was submitted to the subcommittee in December of 2021.

So, NIOSH reworked the case again using all of the current -- current guidance and DR tools. They recalculated annual doses and reran IREP. And, again, there was no need to send the revised dose reconstruction to DOL because the compensation decision did not change.

This case represents an EE who worked at Norton for multiple brief periods during the residual period. There was no monitoring records found, and the EE was diagnosed with a qualifying cancer more than two decades after the employment termination. The original dose reconstruction

calculated internal and external doses of less than one millirem and the rework calculated only modest internal and external doses.

Here's a summary of the external doses. The original used guidance in the 2010 template. The reworked used a revised 2011 template for residual period external dose values. Neither the original order rework prorated doses for partial years of external exposure. The original use of DCF of 1, but the -- well, the rework actually used the DCF of 1.44 for the thyroid as a surrogate organ. This resulted in the rework assigning a modest dose of approximately 30 millirems.

So, SC&A's conclusion on external dose. We determined that the appropriate values were selected from the revised templates. Surrogate organ was correct based on OTIB-5, rev. 5, appropriate DCF values were applied. The -- not applying partial year of prorating, again, is an efficiency and claimant favorable measure. We were able to confirm that all the doses were entered into IREP correctly. And as expected, the reworked external dose increased slightly from that calculated in the original. So, SC&A had no findings in the rework.

For internal dose, the inhalation and ingestion intakes, again, were taken from 2010 version of the template, and those values were updated in 2011 templates. The original compared Uranium-234 types M and S solubility with Thorium-232 M and S solubility, and this resulted in assigning the highest dose from either one, just one dose was assigned, which is associated with type M Thorium-232. The rework assumed an isotopic mixture of uranium, thorium, actinium, all of the radionuclides you see there. The rework compared types M and S with M resulting in the higher

dose. And this resulted in the rework calculating a modest dose of less than 20 millirem.

SC&A again confirmed that correct intake values were input into the CADW program, and we also verified that that type M solubility resulted in the higher dose. Those were entered into IREP properly, and they were assessed up until the day of the cancer diagnosis, so we had no findings with the internal dose.

That concludes PER-59. Any --

MEMBER BEACH: Thank you, --

MS. BEHLING: -- questions?

MEMBER BEACH: -- Kathy. A lot of -- a lot of stuff to go through. But can we go back to page or slide 82? You mentioned that that you should have said that was an observation. And in looking back at it, it's labeled a finding and NIOSH questioned whether this should be an observation. Did we change that officially to an observation? Do you remember?

MS. BEHLING: Yes, yes, we did.

MEMBER BEACH: You did? We did, okay.

MS. BEHLING: Yeah. Yes.

MEMBER BEACH: Okay.

MS. BEHLING: Yeah, I went back through transcripts, yeah, and that was changed to an observation.

MEMBER BEACH: Okay.

MS. BEHLING: Yeah, it was changed, yeah.

MEMBER BEACH: Okay. Then we'll --

MS. BEHLING: I -- I -- I put there closed finding. I should have put

closed the observation. I apologize.

MEMBER BEACH: Well, yeah, and the heading was finding two, so that should have been changed, possibly, also.

MS. BEHLING: Yeah, it started as a finding --

MEMBER BEACH: Yeah.

MS. BEHLING: -- and then it got changed.

MEMBER BEACH: Okay. No -- no worries. I just wanted to clarify. Thank you. Any other questions?

MEMBER KOTELCHUCK: Dave. Hey. On slide 93, just a verbal miscue. You read -- let's go -- there it is. On the lower right-hand column on the reworked dose reconstruction, you said a calculated dose of less than two milli -- less than two millirem, and you meant less than 20 milli. So, I'm -- just -- just to get the -- the --

MS. BEHLING: I apologize.

MEMBER KOTELCHUCK: Yeah.

MS. BEHLING: We're near the end.

MEMBER KOTELCHUCK: Oh, no, no, it's so easy. Not -- not at all. No criticism. I just --

MS. BEHLING: And I'm sure you're all ready to hear me stop talking.

MEMBER KOTELCHUCK: No, no, no.

MEMBER BEACH: No.

MEMBER KOTELCHUCK: But we want to just make sure that the record -- the record that's recorded is recorded properly according to what you said on your slide.

MS. BEHLING: Okay, thank you. I appreciate you correcting that.

MEMBER KOTELCHUCK: No problem.

CHAIR ANDERSON: Should we --

MEMBER BEACH: Sorry, Henry. Kathy, you're doing a fabulous job. It's a lot of work to go through and take care of what should have been probably taken care of many years ago. So, we really appreciate your dedication and hard work on this.

CHAIR ANDERSON: We're really starting to get caught up. I know you have a lot of backlog. But my -- my question is more just one of overall process. How many sites are using templates rather than the more comprehensive approach?

MS. BEHLING: This was --

CHAIR ANDERSON: Do you have an idea? I mean, this was --

MEMBER BEACH: Andy, we do. Yeah, we do have an idea. We have a list of all the templates. I don't remember if it was 39. Tim probably knows off the top of his head, but there's quite a few.

MS. BEHLING: Yeah.

DR. TAULBEE: I actually don't off the top my head, but you're right there, Josey, it's somewhere in the 30s to 40s range.

MEMBER BEACH: Yeah. And we do have a list of those, Henry, and we are addressing them within the subcommittee in our new work moving forward.

CHAIR ANDERSON: And our most of those that -- well, you don't know. But I mean, Tim is the historian here. The question would be, are those mostly from the early periods like -- like with this one? With the multiple revisions here, this is far more revisions for, you know, what is a

relatively small site with a long residual period.

DR. TAULBEE: Most of the templates are for smaller sites, but not all of them. But usually how they started out was we didn't have many claims to start with at that particular site, so we didn't expend the effort to generate technical basis documents and site profiles. Now, over time, some of these sites, we've gotten a large number of claims, and we're converting several of the sites that just have templates right now into site profiles and technical basis documents.

CHAIR ANDERSON: Okay.

DR. TAULBEE: So, that is an ongoing process right now.

CHAIR ANDERSON: Yeah.

MEMBER BEACH: Oh, good. And Kathy was able to find the slides from our last presentation.

MS. BEHLING: Yeah, I was --

DR. TAULBEE: Oh, thank you.

MS. BEHLING: -- see if I -- yeah. So, you're seeing that? You're seeing my screen? Yeah, I --

MEMBER BEACH: Yes. Yes.

MS. BEHLING: -- pulled that up --

MEMBER BEACH: There it is.

MS. BEHLING: -- (indiscernible).

DR. TAULBEE: Yes.

MS. BEHLING: And if --

MEMBER BEACH: And if you would -- oh, go ahead, Kathy.

MS. BEHLING: And I was just gonna say, and Tim actually made a

presentation on this, because we've had a great deal of discussion about these templates at the subcommittee meetings. And we are finally to the point where we have been assigned to review two of them. And I -- I'm sure Josie will want to continue with that. And we're establishing protocol, because we're going to not only look at the dose reconstruction guidelines associated with this. In order to look at the template, we're also getting cases that were reviewed by -- under these facilities so we can ensure that the methodology that's written in the document and the templates that are being used, you know, are -- are consistent. And so, we thought that was a good approach in going ahead to review these documents. So that -- that is happening now. But here, I think there's two pages of these --

MEMBER BEACH: Well, and Kathy, this kind of brings to question, we have been so focused on these back cases that we really haven't done a presentation on what the subcommittee is doing now. And maybe we need to think about that at our next subcommittee meeting about putting a short presentation together, so that we can bring the Board Members up to speed of where we're at and what we're doing in real time.

MS. BEHLING: Yeah, --

DR. ROBERTS: I'm going to have to cut --

MS. BEHLING: -- and we --

DR. ROBERTS: I'm sorry, I'm gonna have to cut in here. We do have a hard stop at four o'clock --

MEMBER BEACH: Okay, thank you.

DR. ROBERTS: -- for public comments.

MEMBER BEACH: So, let's -- I guess we need to finish the vote and

then --

CHAIR ANDERSON: That's fine, yeah.

MEMBER BEACH: Okay.

CHAIR ANDERSON: So, like we've done in the past here, their recommendation is to close PER-059 as recommended by the committee. If anyone objects, please say so now, or if you wish to abstain from voting do so. Not seeing -- everybody's on mute, so if you're speaking, we aren't going to -- so or that means we have accepted the committee's recommendation to close PER-059's review.

MEMBER BEACH: Okay, thank you so much, Henry and Kathy.

MS. BEHLING: Thank you for bearing with me throughout this.

CHAIR ANDERSON: So, you got three minutes for a break.

DR. ROBERTS: Actually, if people wouldn't disconnect, because we just have two minutes.

CHAIR ANDERSON: Okay. Well, let's just keep going forward. Do you know how many public comments we have?

DR. ROBERTS: I was not notified of any, but we do have --

CHAIR ANDERSON: -- (indiscernible), yeah.

DR. ROBERTS: Yes, exactly.

CHAIR ANDERSON: So, while we're waiting for another minute to pass, any of the new Board Members have any observations of this process at this point? Do we have volunteers to join the committee? It's a real technical process, but you really dig into understanding the complexities of the program and how it works in the -- how well the staff have done in putting these together.

PUBLIC COMMENT

DR. ROBERTS: Okay, Andy, I have 4:00.

CHAIR ANDERSON: Okay. I'll turn it back over to you for the public comment period.

DR. ROBERTS: I'm sorry, I'm having a little difficulty coming off mute, but this is the point at which we invite members of the public to offer comments. Typically, we have the comments limited to about five minutes. So, if there's anyone in the public that would like to register a comment, now would be the time.

MS. HAND: This is Donna Hand.

DR. ROBERTS: Hi, Donna. Go ahead, please.

MS. HAND: Okay. Several issues that I'd like to do. First, there was mention about the records of Pinellas Plant and everything and then whenever I was out in Albuquerque for the Sandia, I went to the University of Albuquerque, and they're in the basement. They have a government reading room. And in that government reading room are records of Pinellas Plant. And since the Albuquerque DOE facility had the last records for Pinellas, they took the government's reading rooms records and put them there. They were still in boxes. Hadn't even been filed yet. And we -- I had had to go through boxes and boxes. I found out more records at Pinellas Plant, and they had treated Pinellas Plant as a tritium facility and even had incidents and everything on pine -- from Pinellas listed in those papers and documents. So, there was -- it's records there, but it's at the university in the government reading room. So, you -- Pine -- you're right.

Pinellas -- and then you still have in the very first meeting, workgroup meeting, it was said that Pinellas Plant you can't talk about because of the heather project, because it's classified, still classified today. So when -- in 1992 to 1994 is whenever the tritium tube and the neutron generator went to Los Alamos and then also Sandia. And then when Sandia finally got built, then all of the neutron generator was built and made in Sandia. So, it was not in the '80s. It was in the -- 1994 that it was completely there. And then from '94 to '97 was the decontamination and decommissioning. [identifying information redacted] has stated that they have found more records, but there was no records about the decontamination and decommissioning period. But yet the special exposure cohort petition that was approved, NIOSH is saying we're ending in 1990, but yet they have recognized and admitted there's no documentation of the decontamination and decommissioning period between

'94 and '97. So, you do not have that data, and that should be with Legacy Management -- should have that data there. So, you -- there's several areas that should have it. NNSA was also developed about that time. They should have records about Pinellas. So, again, there's a lot of areas -- and like you said, there's different places that need to go. When I was at Nevada, in the atomic museum there was documentation there that -- whenever I looked up on the computer that was there upstairs, but you can't get upstairs to look at it. You had to request them to bring them down to you to look at those records. So, there was records there as well.

The other issue that I really would like for -- you know, why is NIOSH and everyone else doing job category when the law says that you

characterize the job environment, the occupational environment. That's not the job category. Just like one of the reviews, you said well, it was unlikely he was exposed to -- put to him because of his job category. The guidelines and the methods are in 42 CFR 81, 42 CFR 82. So, I would like for you -- someone to explain to me how come you're not doing the basic occupational environment dose reconstruction of the environment of the worker rather than the job category. And how come the methods are being changed whenever the regulations itself has not been changed?

Thank you.

DR. ROBERTS: Thank you, Donna. Is there anyone else who would like to register a public comment?

Okay, hearing none, I do have a comment to read. I was asked to read this comment from Dr. Denise Degarmo who was unable to make today's meeting. So, I will go ahead and read through that. She asked that the -- the letter be read into the record.

So again, the letter is from Dr. Denise DeGarmo, who’s professor emeritus Southern Illinois University Edwardsville, independent researcher atomic weapons facilities and their workers authorized representative to the Department of Labor Energy Employees Occupational Illness Compensation Program. The letter is addressed to the Advisory Board on Radiation and Worker Health regarding SC&A decision regarding SEC-00256 Pinellas Plant petition dated April 8, 2023. (Reading): Dear Board Members, it has come to my attention that SC&A has been encouraged to arrive at a recommendation for the SEC petition for Pinellas Plant. It has also come to my attention that ORAU has retrieved over 16,000 pages of documentation

relevant to the Pinellas SEC petition for March 2022 and October 2022 data captures at Morgantown, West Virginia. As the authorized petition representatives, I -- representative, I have reached out to the petitioners as well as other former employees at Pinellas Plant and asked if they felt comfortable with a recommendation from SC&A before the newly acquired documents and, parentheses, 16,000-plus, could be thoroughly reviewed. Overwhelmingly, the claimants and petitioners prefer that a decision be delayed until SC&A has had adequate time to review all documents. We are concerned that the petition evaluation report was presented October 13, 2021. The data captures did not occur until March and October 2022. These materials have not undergone a full review by the Department of Energy and therefore could not have factored into a full analysis of the petition by DCAS. Therefore, the recommendation by DCAS as presented in the petition evaluation report that dose reconstructions can be completed is premature and not based on the entirety of records.

Why did DCAS and ORAU wait almost two years after the petition was filed to complete a full data capture? Based on our growing concerns with the way in which DCAS has conducted itself in regard to this petition, we strongly encourage you to be sure that SC&A not be rushed into a premature decision until all evidence has been examined and analyzed. While we have waited a long time for a recommendation, you do us no favors by encouraging SC&A to come to a recommendation when so much information has yet to be analyzed. Sincerely, Denise DeGarmo

All right. Is there anyone else in the public who would like to make a comment? Okay, well not hearing anyone, Andy, I'm going to turn it back

over to you.

CHAIR ANDERSON: Okay. With that, that closes our agenda for today's part of the meeting. So, accept recommendation to adjourn until tomorrow at 1:00 p.m. again.

MEMBER KOTELCHUCK: I so moved.

MEMBER FRANK: Second.

UNIDENTIFED MEMBER: So moved.

MEMBER FRANK: Second.

CHAIR ANDERSON: Does anyone object to adjourning?

MEMBER BEACH: No.

CHAIR ANDERSON: Okay. With that, we stand adjourned until tomorrow at 1:00 p.m. Eastern time.

(Whereupon, the meeting was adjourned at 4:12 p.m. EST).