

Centers for Disease Control  
National Institute for Occupational Safety and  
Health  
Advisory Board on Radiation and Worker Health  
135th Meeting  
Thursday, August 27, 2020

The meeting convened at 1:15 p.m., Eastern Daylight Time, via Video Teleconference, Rashaun Roberts, presiding.

## Present:

Rashaun Roberts, Designated Federal Official  
Henry Anderson, Member  
Josie Beach, Member  
R. William Field, Member  
David Kotelchuck, Member  
James E. Lockey, Member  
David B. Richardson, Member  
Genevieve S. Roessler, Member  
Phillip Schofield, Member  
Loretta R. Valerio, Member  
Paul L. Ziemer, Member

## Registered and/or Public Comment Participants:

Adams, Nancy, NIOSH Contractor  
Barton, Bob, SC&A  
Barrie, Terrie, ANWAG  
Burgos, Zaida, NIOSH  
Burns, Bob, ORAU  
Buchanan, Ron, SC&A  
Calhoun, Grady, NIOSH  
Cardarelli, John, NIOSH  
Cisco, Jeanne, Worker Health Protection  
Program  
Crawford, Chris, DOL  
Fitzgerald, Joe, SC&A  
Gogliotti, Rose, SC&A  
Hughes, Laura, NIOSH  
Lobaugh, Megan, DCAS  
Naylor, Jenny, HHS  
Nelson, Charles, NIOSH  
Rutherford, Lavon, DCAS  
Sundin, Dave, NIOSH  
Taulbee, Tim, DCAS  
Tomes, Thomas, NIOSH

## Contents

Centers for Disease Control National Institute for Occupational Safety and Health Advisory Board on Radiation and Worker Health 135th Meeting Thursday, August 27, 2020	1
Roll Call/Welcome	4
Hanford SEC Petition 57	6
Board Work Session	13
Work Group and Subcommittee Reports	21
Josie Beach, Metals and Controls	21
David Kotelchuck, Dose Reconstruction Reviews	22
Genevieve Roessler, ORNL X-10	22
Paul Ziemer, Update on Lawrence Berkeley	26
Henry Anderson, Sandia and URAW	26
Review of Comments from December	32
SEC Update	37
Idaho National Laboratory Update	44
Reduction Pilot Plant SEC Reduction 253	58
Adjourn	87

## Proceedings

(1:15 p.m.)

### Roll Call/Welcome

Dr. Roberts: Good afternoon and good morning, and welcome everyone. I am the designated federal official for the Advisory Board on Radiation and Worker's Health. And I would like to welcome you all to the second and final half-day of Board Meeting 135.

So like yesterday, let me just go through some preliminaries for this meeting to keep things running as smoothly as possible. So, if you're just on the telephone, all the materials for today -- the meeting agenda, presentations and other documents are all posted and you can find them on the NIOSH website for this program under Schedule of Meetings for August 2020.

So can go there, read all the materials and you can also follow along with the presentation. And all of the materials were provided to the board members and to other staff prior to this meeting.

If you look at the agenda on the website -- and, again, for today, we have a fair bit of content to cover, there's at least one break built into the agenda for each day. And as time allows, we can take more comfort breaks, if time permits.

At the top of the agenda, there's a Skype link which will enable you to watch the presentation through Skype. But just to advise you, you will only be able to speak to the group through the telephone lines and hear the presentation through the telephone lines.

So in order to keep everything running smoothly and everyone speaking can be clearly understood, you'll need to please mute your phones unless, of course, you are speaking.

If you don't have a mute button, press Star 6 to mute. If you need to take yourself off mute, press Star 6 again.

And because we are unable to see each other for this meeting, please identify yourself before your comments or questions.

So let me, before we start getting into the agenda, let me speak to the conflict of interests. We have two agenda items that relate to conflict of interest. One is for the Hanford SEC petition. And Josie Beach is conflicted for that.

The other is for the update on Idaho National Laboratory Site Profile Review, and Brad Clawson is actually conflicted for that one. But I don't expect that Brad will join us for today.

So Josie, you will need to abstain from the Hanford discussion and any voting or casting matters concerning this site by disconnecting from the call between 1:15 and 2:45 Eastern.

When we get to that agenda item I will note that you're abstaining for the record and remind you to disconnect.

There appear to be no other conflicts to address for this meeting. So let me do roll call now. I'll start with the board members in alphabetical order.

(Roll call)

Dr. Roberts: Okay. Well, thank you so much. And let's go ahead and move further into the agenda. Again, if you would please check your phone and make sure that it's muted. If you don't have that mute button, press Star 6 to mute and Star 6, again, to take yourself off.

So, with no further ado, let's get started, so, Josie, if you would go ahead and disconnect from the call now and plan to rejoin us after the Hanford agenda item, that would be great. And I'm noting your

disconnection for the record at this time.

Member Beach: Okay, thank you.

#### Hanford SEC Petition 57

Dr. Roberts: Thank you. Okay, so for Hanford, Mr. Brad Clawson is the chair of the Hanford Working Group, but he was unable to attend this meeting.

So I believe that Dr. Paul Ziemer agreed in our last Work Group meeting to present on the Work Group's behalf with some help from SC&A. So, Paul, I'll go ahead and turn the floor over to you.

Member Ziemer: Okay, thank you very much. And the slides that we're using today were prepared, actually, by SC&A, by Joe Fitzgerald and I think Ron Buchanan were both involved in that, and both are on the line today so they can help out when I run into difficulties.

The SEC history of Hanford is pretty complex and I can't go through all of the background details here, but I do want to point out you can get a good summary of what has transpired, starting with SEC 00057 and the subsequent study into parts of that SEC as well as subsequent SEC petitions.

You can find a good summary of these in the NIOSH white paper that we'll be talking about today. It's entitled, Assessment of Hanford SEC Issues, and it's dated January 7th, 2020.

Here on the slide before you, you see an abbreviated version of this. And you'll note that our discussion today focuses on a portion of the SEC evaluation for SEC 00226. That petition was actually an 83.14 type of petition initiated by NIOSH. And they recommended adding a Class for contractors and sub-contractors who were not employees of the prime contractors during the period of January '84 through December '90.

And as a part of the evaluation of this SEC, NIOSH

has evaluated or carried out an evaluation of individuals who are employees of the named prime contractors.

That January 7th white paper that I just referred to provides the status of the NIOSH assessment for the remaining SEC issues. And the Work Group has met twice since that paper to review issues raised by SEC from its review of the NIOSH white paper.

SEC provided its review to the Work Group in an April 2020 meeting and provided an additional memorandum on June 24th that summarized the actions of the April meeting and went over the remaining actions that were required.

So let's go on to the next slide. This slide presents the overall conclusions to the NIOSH white paper. And you'll notice here -- let me start on the left side -- you'll notice the reference to SEC 00201.

That was an 83.14 petition also which added a class for July '72 through December '83. And the basis for the class established by 00201 was that NIOSH lacked sufficient information to allow it to estimate with sufficient accuracy the internal exposures to purified highly enriched uranium, U-233, neptunium, and thorium.

And the Evaluation Report for 00201 was approved by NIOSH in June 2012. It was accepted by the Board in July of 2012. And that evaluation report determined the dose reconstruction was feasible from '84 onward for employees of the prime contractors.

The overall conclusions for the assessment are shown on the right side of the slide. And you can read those there, starting with radionuclides of concern with no evidence of large-scale use of the radionuclides of concern or any cases of potential chronic sources of intake were present.

On the issue of lack of routine monitoring data for nonchronic sources, NIOSH has pointed out that this

does not equate to dose reconstruction infeasibility.

Then on programmatic incident reporting, if it's clear that bioassay methods were available for all the radionuclides of concern. And those -- or that bioassay was used when needed. And finally, on workplace monitoring, the workplace monitoring was backed up by a routine bioassay program.

Let's go on to the next slide. So this slide is a listing of issues that have been the focus of the Work Group meetings this year, starting with radionuclides of concern, and you see them listed here. Then let me elaborate a little bit on each one of those. And the SC&A issue numbers are listed beside the radionuclide identifications.

On thorium-232, that issue had to do with potential thorium exposures during remediation, the use of thorium in fuel fabrication in the 300 area and the possible use of thorium in some of the other Hanford areas.

SC&A has agreed that there's no evidence of process use --

Dr. Roberts: I have one --

Member Ziemer: I'm sorry -- in operations involving thorium-232.

Dr. Roberts: Please, just a reminder to put yourself on mute, please.

Member Ziemer: SC&A agreed there's no evidence of process use and operations involving 232 in the 1984 to 1990 timeframes, nor were there any incidents involving intakes of that.

The HEU, highly enriched uranium issue, SC&A had questions on whether or not NIOSH had sufficiently confirmed lack of operations involving HEU in the 308 building, particularly given that it was unknown how frequent the operations involving enriched uranium took place.



However, SC&A agrees that routine bioassay would have presumably detected any enriched uranium incidents.

The issue on Uranium-232, SC&A had questioned whether or not NIOSH had investigated scrap solutions of U-233 in the Plutonium Finishing Plant and possible applications in experimental work in the 300 area.

And after all was evaluated, NIOSH -- or SC&A agreed that NIOSH had done a broad review which included interviews and -- area-specific records. I think we're getting interference here again, but I'll go ahead.

NIOSH had reviewed or had a broad review that included interviews and area-specific records and material control and accountability records, so SC&A agreed that they had covered that well.

And then on neptunium-237, the issue of intakes for Hanford, SC&A agreed that there was no evidence of potential chronic intakes of neptunium-237. And the incidents were limited to one in '89 that involved chemical separation work and there had been adequate bioassay follow-up, so that neptunium issue was also resolved.

There were also some programmatic issues here, one dealing with special tritium compounds and, in particular, a concern about the possibility of metal tritides, one that we've run across in other facilities, whether or not that could be potentially present.

But SC&A agreed that there's no evidence of any post-irradiation examinations of irradiated tritium target rods and any potential exposures to such tritiated compounds could be addressed if NIOSH does, in fact, identify an exposure source of metal tritides.

Let's go on to the next slide. It really summarizes those resolutions. I mentioned the radionuclides of issue. The -- and I mentioned the tritium. The other

issues, the N Reactor skin contamination issue, that was resolved by demonstrating that there were adequate monitoring records.

Closed monitoring related to minor incidents were handled by review of the incident reporting system and bioassay records. And the possibility of Building 324 leaks was resolved by review of the incident reports.

So the Work Group has closed all of those issues, the ones we've just summarized. But there are some remaining issues that are broader, looking forward, that relate to the SEC in the Site Profile.

One enumerated Issue, 14, and Issue 23 -- Issue 14 deals with estimated plutonium intake and Issue 23, the adequacy of the REX database. These are SEC-related issues. And they're also some co-exposure model issues that will have to be dealt with, and the issue numbers are there.

These are non-SEC related and they deal with the site profile matters that will have to be dealt with going forward. There's an issue related to intake estimates for recycled uranium at Issue 8 and another one on external exposure geometries, a generic issue that might have to move to the broader database of how we deal with programmatic issues.

So, finally, well, let's see. Is that the last one? One more slide? Oh, yes, the Work Group and NIOSH agreed that NIOSH would take several actions. They're enumerated here.

One is to complete the co-exposure models based on Implementation Guide and that is scheduled for later this year. Hopefully, this, within a couple months -- oh, not this year -- couple years off if this slide is correct.

I'd forgotten it was showing as 10-22. Is that the correct estimate date on that? I'll have to ask the NIOSH people that in a minute.

And then once the SEC issues a result or revised the site profile, then those changes will have to be evaluated in the Program Evaluation Report.

So that completes the slides. I did want to clarify that October date. Was that the correct date estimated by NIOSH?

Mr. Nelson: Dr. Ziemer, this is Chuck Nelson. That's the completion date. The project start date is the end of this year, December 2020, but this slide involved to do a co-exposure evaluation --Member Ziemer: Right.

Mr. Nelson: -- that have been involved. So that is the correct completion date. But it'll be getting started here in just a few months.

Member Ziemer: Right. So there's still a lot of work to do. So, this is basically a status report. There's no action needed by the full board at this time, but it's appropriate to ask some the questions and both SC&A and NIOSH are the folks to answer the questions, probably.

Dr. Roberts: So any questions on the presentation?

Member Valerio: So this is Loretta. I have a question. Can you hear me all right?

Member Ziemer: Yes, go ahead, Loretta.

Dr. Roberts: Yes.

Member Valerio: Okay, so the SEC remaining issues on the plutonium intake and the database, the SC&A completion date on those two issues will be 2022 as well since they're part of the co-exposure model?

Mr. Nelson: That's correct. The --

Member Ziemer: I believe that's correct.

Mr. Nelson: -- something else in NIOSH?

Member Ziemer: Yes.

Mr. Nelson: Yes, that is correct.

Member Valerio: All right, thank you.

Member Ziemer: Any others? And, Joe or Ron, do you have any additional comments or clarifications?

Mr. Fitzgerald: Yes, this is Joe Fitzgerald. I think that covered it pretty comprehensively. The only comment I would offer is that I think NIOSH and SC&A were able, through quite a bit of data capture and interviews, to settle out the nuclide-specific and facility-specific issues.

I mean, as Dr. Ziemer enumerated, there were quite a few of those at Hanford, as you can imagine, with that long history. So the question of adequate data for all these force terms and operations, I think, did take a considerable amount of effort.

I think that is what we're reporting can be -- and the Work Group did close out. So that leaves essentially the co-exposure model as the remaining item. And -- but I think that is quite a lot of work that has been accomplished to settle out those issues.

So I think this, again, is a status that says that we await the co-exposure model to be developed. And that should address whatever remains as identified in those two items.

Mr. Nelson: Yes, this is Chuck Nelson from NIOSH. I guess one thing I did want to add is that during the review of this co-exposure model and the evaluation of such, if we find any dose reconstruction infeasibilities during this evaluation, NIOSH will kick into action a 83.14 and make a suggestion to designate a SEC class.

So just wanted to make that clear that this was going to be an ongoing effort, quite involved, in fact, and it will take some time. And anybody here

with the advisory board that's been involved with these co-exposure evaluations, they know that involves a lot of work.

So it'll be looking closely at all this data to see if we can reconstruct dose for these unmonitored workers and make sure the models we have in place are adequate to do such.

Dr. Roberts: Any other questions or comments about this presentation? Okay, hearing none for the time being, I believe there is a, you know, there's a space on the agenda for any petitioners to present or to comment on Hanford.

Okay, I'm not hearing any. And so, Paul, you said that, at this point, there's no action or anything like that.

Member Ziemer: No, we -- the Work Group specifically talked about whether action is needed. We regarded this mainly as an update, even though we've closed a number of items here.

But as you see, there's still a lot of work going forward, so there's no action needed at this time.

Dr. Roberts: Okay. Great. So you were right in your assessment that we're about an hour ahead of --

Member Ziemer: Right, right.

Dr. Roberts: -- had planned in terms of these agenda item.

Member Ziemer: Right.

#### Board Work Session

Dr. Roberts: So I'm wondering how best to proceed. We do have the board work session. And I believe it's permissible for us to, you know, go to that session, unless other people have ideas for what we need to do next.

I know the SEC petition's update is next. What are -

- what's preferred?

Member Ziemer: Probably, I think doing some work group activities or board activities would be probably a good way to do it.

Dr. Roberts: Okay.

Member Kotelchuck: Sounds

Dr. Roberts: Great. Okay. Then why don't we do that? And then we can get started with the Board Work Session.

Member Beach: Rashaun, this is Josie. I'm back on.

Dr. Roberts: Perfect. Thank you, Josie. And what we talked about was that, since we're so -- about an hour ahead of the end time for that agenda item, we were going to do the Board Work Session. Does that sound agreeable to you?

Member Beach: Yes, it does. Sounds good.

Dr. Roberts: Okay, great. Well then let's jump right in. So the first thing under the Board Work Session is that, you know, we need to schedule some meetings to get some clarity around a few items with regards to upcoming meetings.

So we'll just take it from there. So let's start with what's up and coming. Let me just say that there is an October 27th teleconference planned for the Board where we will -- the primary focus will be planning for our full board meeting in December.

And that's currently scheduled for October 27th at 11:00 a.m. Eastern Time. And that will just be a regular teleconference.

And then the full board for December is planned for December 8th and 9th with a start time of about 1:15 p.m. Eastern Time. And what we're trying to do for that, since there hasn't been any clearance or word that travel is in order, we're going to just plan to do that full board meeting via Zoom.

So that's just to kind of give you an update on where those two meetings stand. Are there any questions about those? Okay, hearing none -- so let's move on to April of 2021.

And I believe at -- it might have been the June teleconference I might have indicated that that meeting would be tentatively scheduled for April 21st and 22nd. And I need to revise that because we're going to need to move that date up about a week.

Zaida has an important commitment that she has to attend to. So the alternative date would be April 14th, which is the previous Wednesday, and April 15th. Is that doable for you all?

Member Beach: Zaida, this is Josie. It's good for me.

Member Lockey: Jim Lockey, good for me.

Dr. Roberts: Great.

Member Valerio: Loretta, good for me.

Member Roessler: This is Gen, good for me.

Dr. Roberts: Okay. Is there anyone it's not good for? Okay, well, assuming that we can move forward with that, we'll go ahead and plan for the 14th and 15th of April 2021 for an in-person full board meeting.

So now that we've had that established, let's talk a little bit about potential locations that might be appropriate for that meeting. So let me just open that up to you all.

I know that we were supposed to have something in Washington State at one point. Then it was Idaho Falls. Are those two locations contenders for this? Or, you know, what are the thoughts?

Member Beach: I'm curious where we'll be with Savannah River by then.

Dr. Roberts: I know. And that Work Group doesn't meet until November 17th and the 20th, so it would be a while before that Work Group would come together.

What about other thoughts or ideas for location?

Member Kotelchuck: It's hard to think about what will be -- what our situation will be. So, and to foresee where we'll be finished or what we'll be finishing. So, to my mind, it's rather hard to decide now on any location.

Maybe I've just been house-bound too long, but it's just a big world out there.

Dr. Roberts: Yes, yes it is hard to forecast that far into the future. Would a better approach for now be just to throw out say three potential locations and then assess them later? Would that be helpful?

Member Kotelchuck: It would be. It would be.

Member Beach: Yeah, this is Josie. I agree with that approach.

Dr. Roberts: Okay. So, one potential would be where the Savannah River site is located. And what about others?

Member Beach: I think Idaho should definitely stay on the list.

Dr. Roberts: Mm-hmm. Okay. Yeah, that makes sense. What about where -- I forget the city, but the Washington State location? Would it --

Member Ziemer: Well, that would be Richland, Washington. And the only reason for going there would be if we had anything in Hanford that's critical and I'm not sure we're at that point.

Dr. Roberts: Okay.

Member Ziemer: Well, where do we stand on Y-12? Anybody know? Anything going on there that we



need to meet at Oak Ridge?

Member Beach: There is a meeting coming up for that.

Member Kotelchuck: Yeah.

Dr. Roberts: Yeah, there's a meeting up and coming for that one.

Member Beach: And we are doing --

Member Ziemer: Yeah, I can --

Member Beach: Oak Ridge documents are being reviewed in May, may be ready soon, but I bet LaVon has some ideas.

Mr. Rutherford: Yes. I was just going to say, we are working on an addendum that covers the '87 to -- 1987 to 1994 period. I expect that addendum will probably be out around October timeframe.

And as Josie indicated, we have other documents that are being reviewed as well, including the additional document that we actually received a week or two ago that we spoke about last night.

I think the only thing that we would probably be ready for would be an update that we could provide if it was done at Y-12 at that time.

Member Ziemer: When did we last meet in Oak Ridge? It's been a couple years, right?

Member Roessler: It's a couple years, I think. We have a --

Dr. Taulbee: August. This is Tim Taulbee. We met in Oak Ridge last August, so it was one year ago.

Member Ziemer: Oh, just a year? Okay. Time flies. What about Savannah River? How long's that been?

Member Beach: Now that one's been a few years ago.

Dr. Taulbee: Yeah, I'm thinking it was three -- this is Tim Taulbee again. I believe that was about three years ago. But that's already on your potential list of Savannah River, Idaho and here in Oak Ridge here, so.

Member Kotelchuck: Yeah, I believe that's correct, Dave.

Member Ziemer: Would we have enough material that we could have a good update for Savannah River at that point, in April?

Dr. Taulbee: This is Tim again. We'd certainly have enough material for an update. That's pretty much guaranteed, especially after the two-day Work Group meetings that we're going to be doing in November.

So an update would fully be in order, from that standpoint. As far as having the SEC wrapped up, that's a bit questionable to me at this point, and it depends upon how those November meetings go, so I don't know the answer to that.

Member Ziemer: Well, so --

Dr. Taulbee: Who's speaking?

Member Ziemer: Yeah, Ziemer again. I'm sort of asking, do we have to wait till it's wrapped up or is it important to give an update?

Dr. Taulbee: We can certainly do an update. That's not a problem.

Member Beach: Yeah, and I think it's important to give the update, not necessarily do the wrap-up, in the location that we're meeting.

Ms. Adams: The last -- this is Nancy Adams. The last time we were in Augusta was March of '13 and then followed up again in March of '14.

Member Ziemer: That's a long time.

Ms. Adams: I'm sorry, April, April of '14.

Member Ziemer: It's been six years. Ms. Adams: Since Augusta, right.

Member Anderson: Yes, that's a long time.

Member Ziemer: Sounds like we're due.

Member Kotelchuck: Yeah. And that's a nice time of year down in Augusta, in the springtime. Weather's pretty good.

Dr. Roberts: Okay. So it sounds like, so far, just to summarize, we have Augusta for the Savannah River site; also Idaho Falls, possibly, and Oak Ridge.

Member Ziemer: Mm-hmm.

Dr. Roberts: Okay. Should we add any other locations to this list of candidates?

Okay, not hearing anything, let's talk a little bit about the teleconference that would follow that face-to-face meeting. And I have here that should be scheduled for the week of June 21st, 2021.

And it seems like the Board -- Wednesdays or Thursdays seem to be the best days for people. Would there be a preference that week for Wednesday, the 23rd, or Thursday, the 24th?

Member Beach: This is Josie. I'm good with sticking with Wednesdays.

Dr. Roberts: Okay.

Member Ziemer: Ziemer here. Wednesday's good for me also.

Dr. Roberts: Okay.

Member Kotelchuck: I'm fine with Wednesday.

Member Schofield: Yeah, I'm okay too.

Dr. Roberts: Any -- okay, perfect. Anyone --

Member Valerio: This is Loretta. Either day works for me.

Dr. Roberts: Okay. All right, anyone else want to weigh in? Okay, so it looks like we'll go for Wednesday, June 23rd for the teleconference.

And then we need to identify a date to meet face-to-face. My understanding is that these things are planned a year out. So, we need to at least get a rough time for the face-to-face meeting that is supposed to occur next August.

And I have here that the week of August 23rd, 2021 would be the candidate week for this. Are there any folks who would not be available to tentatively schedule this?

Member Beach: Rashaun, can you give those dates again? August --

Dr. Roberts: That would be August 25th, which I think is a Wednesday, and August 26th.

Member Beach: Yes, it is.

Dr. Roberts: Okay, will be the Thursday. So how do those look for people?

Member Beach: Sounds okay.

Member Kotelchuck: That's okay with me.

Dr. Roberts: All right now. Should we book this now so nothing else comes in?

Member Kotelchuck: Well, we can hold it.

Member Ziemer: Yeah, let's pencil it in.

Dr. Roberts: Okay. Great, okay, so we will hold, again, August 25th and 26th, 2021 for a potential face-to-face meeting.

Okay, so does anyone want to -- have any questions or anything about scheduling any of these meetings at this point? Or are we all on the same

page?

Member Ziemer: We're good.

### Work Group and Subcommittee Reports

Dr. Roberts: Okay. Okay, perfect. Well, if everybody's okay with that, we can start going into the Work Group and subcommittee reports.

And so I will basically turn the floor over -- if someone could mute their phone? I can hear something in the background. Thank you.

So if we want to just move ahead with the Work Group and subcommittee reports, I'll hand the floor over to the chairs of those groups and subcommittees. Who would like to start?

### Josie Beach, Metals and Controls

Member Beach: This is Josie. I'll go ahead and start off. So you already mentioned Metals and Controls. We have a Work Group scheduled for September 2nd, and so that one -- none of my other Work Groups have anything new to report.

But procedures, I will mention that SC&A compiled a list of technical guidance and PERs that have outstanding findings and observations. This was sent out to myself.

I don't know if it went out to the rest of the Subcommittee, but it went to myself and NIOSH in July. We are waiting for a response from NIOSH looking at those outstanding items, to give us an indication of when they'll be ready for another subcommittee meeting.

I don't remember offhand when the last Subcommittee meeting was, which tells me it's been a very long time ago. So, hopefully, we'll hear something from NIOSH and we'll be able to move forward with scheduling another meeting for Procedures. And that's all I have, Rashaun.

Dr. Roberts: Great. Who's next?

David Kotelchuck, Dose Reconstruction Reviews

Member Kotelchuck: The Subcommittee on Dose Reconstruction Reviews, we had a meeting, as you know, on July 29th, a very useful meeting. And we reviewed cases from Set 25, continuing our review on that set.

And then we went into review cases for Set 27, a lot of Category 1 cases. Now we have our next meeting set, I understand, for November 4th. I don't -- we had -- that was our first choice, and I'm not sure -- we had to check whether everybody could make it.

And I'll come back to that in a second, Rashaun. But we, at that meeting, it's either November 4th or the week previous, October 20-something -- we will go over the three of the six blind cases that we selected from Set 26.

And then we'll go back to finishing further on Sets 25 and 27. And, Rashaun, I wondered -- we had originally had the two dates with November 4th, the preferred one. And I don't remember who had to be -- who you had to check with or who we had to check with.

Dr. Roberts: Yes, we did hear back from everyone. So November 4th is the date.

Member Kotelchuck: Good.

Dr. Roberts: And just for your awareness, I'll be sending the Federal Register notice package on Monday.

Member Kotelchuck: Excellent, excellent. Okay, so November 4th it is. And that's fine. Good. That's it.

Dr. Roberts: Okay. Who would like to go next?

Genevieve Roessler, ORNL X-10

Member Roessler: This is Gen. I don't know if we're

-- oh, I guess there are a couple of us talking? Anyway, I don't know if we're going alphabetically or according to Work Group or people, but I would like to make a report on ORNL X-10 work.

Member Kotelchuck: Great.

Dr. Roberts: Sure.

Member Roessler: Okay. We -- I think we had a change in our Work Group. I think our Work Group was named about eight years ago and at that time I was named the chair.

And I think Josie was put on the Work Group at that time. And if I'm right, I think Bill Field and Loretta Vallerio had been added just recently.

Anyway, we haven't met yet, but much work is being done. I thought I'd go into, just a reminder, a little bit of background. If we go back to September 2012, at a Board meeting, at that meeting, Dr. Taulbee presented NIOSH's Petition Evaluation Report of SEC-00189 for Oak Ridge National Lab X-10 to the Board.

And that was a 60-slide presentation, if I remember right. But it was excellent. He gave great background -- pictures, maps. As most of you know, this is a very complex site. So that was very helpful.

His presentation included determinations, external and then with regard to dose reconstruction. And then internal on plutonium, uranium, thorium, and fission products.

It did not include the, what we call the exotic radionuclides, or at least not all of them. Now this was a huge undertaking. As Joe Guido said in a later report, and I'll put this in quotes, as a wide array of radionuclides.

And I think -- I've forgotten the exact count, but I think there were over 200. So it's a huge undertaking. And it's not just the fact that there's so

many that have to be dealt with, but if -- those of you who are familiar with that site know that there was overlap with Y-12 in production and with regard to exotic radionuclides.

So a lot of work has gone in during that time. Then in -- let's see, if we go up about six years, in April of 2018, NIOSH came out with a report. And that one, let's see, was called Monitoring Feasibility: Evaluation for Exotic Radionuclides Produced by the ORNL X-10 Isotopes Division.

This was presented, given to the Board. This report, again, was fairly long. And it included a general update on all Oak Ridge facilities. So at this point, then, with that report or Work Group, tasked SC&A with a review of the report.

So then, in October of 2018, SC&A submitted their review, as requested, turned over to NIOSH. And just recently, in June of 2020, NIOSH responded with a White Paper. The title's NIOSH: Response to SC&A Evaluation of SEC-00189 ORNL X-10 Report 0090.

Now this was a big step forward and so you'll see why we're reporting today because we're excited, at this point. And in August, August 10th, we got a memo from Joe Fitzgerald that SC&A has begun review of NIOSH's response.

So that's where we are. We're awaiting word now from SC&A. And I guess at the point we get that, then maybe the Work Group will really have to get to work. So that's where we're at.

Dr. Roberts: That sounds great. Any questions? You can --

Member Beach: My only question -- this is Josie. Sorry, Rashaun. Does SC&A have any timeline on when their report's going to be ready?

Mr. Fitzgerald: Maybe Ron might want to chime in too, but we're probably midway through our initial



review and have already drafted some materials. So I think we're probably talking toward the end of the -- maybe October or November timeframe.

Dr. Buchanan: This is Ron. I agree. We have the rough drafts started. We're waiting for some inputs.

Dr. Roberts: So, again, seeing -- Member Roessler: I'm sorry. Go ahead, Rashaun.

Dr. Roberts: I was just going to say, if that's the timeframe, then maybe we're looking at something like the beginning of the year for a Work Group meeting, maybe?

Member Roessler: Yeah, we were both thinking the same thing. So, yes, I think that'd be a good idea that, to kind of keep that tentatively in mind.

And I don't know. I assume we're still planning on doing Work Group meetings like this by telephone?

Dr. Roberts: Probably Zoom. We're slowly kind of making that transition to doing more and more Work Groups and things via Zoom, so --

Member Roessler: To Zoom?

Dr. Roberts: Yeah, I would think a video conference of some sort.

Member Roessler: Yeah, I don't know if I'll have my new hip by then or not. I sure hope so. But I'm not looking forward to traveling so that Zoom meeting sounds like a good plan.

Dr. Roberts: Okay, great.

Member Roessler: Okay, thank you.

Dr. Roberts: Sure. Any other questions or comments for Gen? Okay. Are there any other Work Group or Subcommittee reports that people want to present?

Paul Ziemer, Update on Lawrence Berkeley

Member Ziemer: This is Ziemer. I can give a quick update on Lawrence Berkeley. Not too much to report, but the Work Group last met in November of this past year.

And after that then -- the Work Group is mainly focusing on issues on the Site Profile, a number of open issues or findings, really findings.

And since that time, NIOSH has done a data capture, I think, in January of this year and also done some interviews at Lawrence Berkeley. And so they are going through those materials.

I think it'll be a while before we get an update from NIOSH on that, but we're sort of in a holding pattern at the moment until we get the next analysis from NIOSH on the outcomes of data captures and the interviews as they relate to the Site Profile.

Dr. Roberts: Thanks for that update. Any questions? Okay, hearing none, are there any more reports people would like to share?

Henry Anderson, Sandia and URAWE

Member Anderson: I think a little summary of the status that you emailed out seemed, at least from my end, to be up to date. Sandia, we're moving forward with the -- finally got the go-ahead on the - - to use the interviews with the guards, so we should have some action on that, hopefully, before the end of the year.

SC&A is reviewing that. My other group, the URAWE, you heard our update on that earlier with the W.R. Grace.

Dr. Roberts: Right, right. So just to clarify, which Work Group were you referring to with the interview? Are you talking about INL with the interviews?

Member Anderson: I think so.

Dr. Taulbee: Actually, that was -- I think it was -- that was Sandia

Member Anderson: It was Sandia. Right, that's what I said.

Dr. Roberts: Okay. I'm sorry, I didn't hear you. Okay.

Mr. Fitzgerald: And just to follow up on what Henry was saying, we did get a go-ahead from the interviewees to use the summary that we had given them a few months ago for review. So that enables SC&A now to pretty much complete its report.

We prepared a report with everything but that one reference, so we're relatively close to being able to issue a report on Sandia, probably the next month, maybe five, six weeks.

Dr. Roberts: And so would we anticipate doing a Work Group meeting sometime before the end of the year for Sandia?

Mr. Fitzgerald: Certainly after the Work Group, but we will certainly be able to provide our input on Sandia relatively soon now that we have this go-ahead.

Member Anderson: Yeah, I would think we would do a Work Group call.

Dr. Roberts: Okay, great. Thank you. Okay, any questions? What about any more updates?

Mr. Calhoun: Rashaun, this is Grady. Before you close up the --

Dr. Roberts: Hi, Grady.

Mr. Calhoun: -- Work -- the Board's Work Group session here, we just got some information. We may have some difficulties with that Board Meeting August the 25th. We have at least two people that

have pre-paid-for vacations that are going to be out for that week.

So if you pencil that in, pencil it in really lightly. Let's see if we can think of something, a potential option for that August 25th meeting.

Dr. Roberts: Okay. How would people feel about an alternative, either pushing it a week up or pushing it -- well, I guess it would have to be a week up if we wanted to keep it in August.

But what is availability like for that? I don't -- let me open the calendar up.

Member Beach: The 18th and 19th works for me.

Dr. Roberts: That would be 18th and 19th?

Member Beach: That's pushing it up, yeah.

Member Kotelchuck: Oh, that's pushing it back, if you will.

Member Beach: So August -- okay, sorry, that's back.

Member Kotelchuck: No, the reason I -- I was alert to that because we typically have our family vacation when, the last week before the kids go to school, the grandkids.

So that second week in August is generally bad for me. I will not say it's impossible, but --

Member Beach: Dave, that's the third week, the 18th and 19th is the third week in August.

Member Kotelchuck: Yeah, it's the third week. It's the third week.

Member Beach: Yeah, 11th and 12th is the second week.

Member Kotelchuck: Okay. I don't have my calendar right in front of me.

Member Beach: Yeah.

Member Kotelchuck: For a number of reasons. Okay, well, I can handle that. Okay, I can handle that, personally. Other -- I don't know what other folks --

Dr. Roberts: Okay. Yeah, how about other folks? Does that work for you, Wednesday the 18th or Thursday, the 19th?

Member Ziemer: Okay, for Ziemer.

Member Valerio: Okay for Loretta.

Member Anderson: It'd be okay. Again, it's -- that is how --

Dr. Roberts: Okay for Jim?

Member Lockey: Yeah, okay for Jim Lockey.

Dr. Roberts: Okay for --

Member Schofield: Okay for Phil.

Dr. Roberts: Okay, someone else was speaking. I couldn't hear.

Member Beach: That was Henry.

Dr. Roberts: Hi, and, Henry, what were you saying? I'm sorry, I didn't hear you.

Member Anderson: I'm saying that's -- August is always vacation time, but right now that would look good for me.

Dr. Roberts: Okay, thank you.

Member Schofield: This is Phil. Right now, that'll look good for me too.

Dr. Roberts: Okay, great.

Member Kotelchuck: Let me ask -- Dave -- how, you know, we always met in August. And that

always seemed problematic to me. I've managed to make all the August meetings because our family events are a week before or a week after.

But why not July, which is not quite as heavy a month for traveling -- for vacation, since we're talking about it this long in advance? Why not meet in July?

I mean, June is easier for people. July is harder. August is hardest. And then, September, we're all back.

So is July -- I wondered what others thought, so starting with other board folks -- well, starting with all folks, what would a mid or late July be like for people compared to August?

Member Beach: This is Josie --

Member Anderson: Wasn't part of the problem the end of the fiscal year and --

Member Kotelchuck: So August is -- end of and we're out the Labor Day holiday.

Member Anderson: -- for some states on June 30?

Dr. Roberts: I'm sorry, a couple of people were talking at the same time. Dave, you want to finish up your comments and then we can open it up to the other comments?

Member Kotelchuck: Okay. I heard Josie and Andy. So just say -- Andy was saying that we're the end of the fiscal year is the end of July, I believe, did you say?

Member Anderson: No, in June.

Dr. Roberts: Yeah.

Member Anderson: June 30th.

Dr. Roberts: Well, I guess it depends on whose fiscal year because the end of the fiscal year for the

government is the end of September.

Member Kotelchuck: The end of September?

Dr. Roberts: Yeah.

Member Kotelchuck: So July would not interfere with that. What do others think about July? Just broadly.

Dr. Taulbee: This is Tim. If I may speak -- this is Tim Taulbee. The Health Physics Society typically meets in July. And next year, the meeting, the annual meeting is July 25th through the 29th. The following year, it is July 16th through the 21st.

So, as you know, in this program, both NIOSH and ORAU have a lot of health physicists that --

Member Kotelchuck: Yeah.

Dr. Taulbee: -- are typically busy here in that particular month. And so that's one of the reasons, I believe, we avoided July in the past.

Member Kotelchuck: Got it. Okay. Well, that's -- those are important meetings.

Dr. Taulbee: Yes.

Member Kotelchuck: And so, in my mind --

Mr. Rutherford: This is LaVon Rutherford. I wanted to add another thing too. The reason we've switched it, we actually, prior to this, if you guys remember, we had one more board meeting on the calendar, and we did do it in July and we bounced around the Health Physics Society meeting.

But when we dropped one of our board meetings, just the spacing set perfect where we went December, April, August. And so that kind of spaced the board meetings out.

I mean, it doesn't matter to me, one way or the other. I was just kind of giving you a little history of

why we stayed with August.

Member Kotelchuck: Right. Right, okay, well that's helpful. And it sounds like there were problems. And so, sounds like we -- it might be better to stick to the August and work our family vacations around it.

So, okay, well good. Thanks for considering it and clarifying why we don't meet in July.

Dr. Roberts: Great. Well, thank you for your flexibility, Dave. So, Grady, August 18th and 19th, that's more doable for folks in the program?

Mr. Calhoun: Absolutely, that works fine.

Dr. Roberts: Okay. Great.

Mr. Calhoun: Thank you for that, by the way.

#### Review of Comments from December

Dr. Roberts: Sure, absolutely. I think the last bullet on the work session is reviewing public comments from December, which, of course, I was not present for that, but I did receive a log of the comments and some responses.

So it looks like most of the responses, I think maybe there were ten in December. It looks like most of them were related to a specific SEC petition or a generic comment regarding SEC petitions or their consideration by DCAS, the Board, NIOSH, or HHS.

And it looks like there was a person who commented primarily in regards to the Savannah River site. And there were questions about needing definitions for what's meant by sufficient accuracy, comments about the need to stratify populations for coworker modeling because of the heterogeneity of the population.

Some comments about imputation and a warning against relying on work permit to establish whether a person had been working in a particular location



or on a particular task.

And that, I guess, a work permit is -- lists an unrealistically low number of laborers. So that looks like the first set of comments. And this coding, I think something like no response required, I believe is what that means, for those comments because they are regarded in a particular way. Let me go back.

Because they are more rhetorical type comments or generic type comments is what I understand from that. But if anyone wants to weigh into this, I'm just kind of going off, not really knowing the comments.

Does anyone want to chime in with anything on that set of comments? Okay. And then there was another set of comments that were offered. It looks like that was -- those were mainly in regard to the Santa Susanna and DeSoto sites.

And it looks like one comment pertained to the presence of americium, thorium, and associate progeny at Santa Susanna and DeSoto outside of the current SEC period, until 1999.

And there was a comment that NIOSH and SC&A have advised the Board that there's nothing of real significance in the documentation and the documentation that a person had submitted that they have some -- they have to fully explain their documentations.

And then there were some questions about stack emissions data there. And there's been a response. There's a response on this offered by Lara Hughes.

And that is the stack emissions issue has been explained to the Work Group and the Board. It was a panel analysis of composite samples and does not indicate emissions of operational quantities.

The americium -- I'm not sure if I'm pronouncing that right or reading that right -- found in the mass spec lab is something that needs to be investigated

further but also doesn't indicate processed levels of materials.

So that was the response there. And is Dr. Hughes on the line? Or would there be any questions in regards to this response?

Dr. Hughes: This is Lara Hughes. I'm on the line. Sorry, hold on.

Dr. Roberts: Okay. I mean, is there anything further that you wanted to say about this?

Dr. Hughes: No, not at this time.

Dr. Roberts: Okay. Any questions from anyone about it?

Okay, the next comment from that person is that NIOSH has confirmed we can't track worker movement between worker areas or between the work sites themselves and can't tell which work site a worker was at while monitored or exposed, as to radiation of course.

And this has been accepted as a standalone reason to accept an SEC at other sites. And again, the response was from -- submitted, it was by Hughes.

And the response is worker assignment to sites is really a DOL issue. Any further elaboration or question about that?

Member Ziemer: This is Paul. Could you clarify, where these responses made to the petitioner -- to the commenter or to the Work Group or -- maybe Lara can tell us a bit --

Dr. Roberts: Comment? Yeah, I would put it to her.

Dr. Taulbee: This is Tim Taulbee. What we typically do in this particular case is we will provide a response that you're reading through here now.

And it's for the Board's information of what or how we kind of break down the responses and what our

response to that is.

We generally don't go through these individually, like is currently being done, but we certainly can, the materials, product here, to, but I did want to mention that, from that standpoint.

When there is something, because these are active open petitions that is particularly being responded to here, these particular issues are typically raised during the public comment, as noted, for the Board's consideration.

And then we are responding to that and further discussions then typically happen with the petitioner present from that particular standpoint when we do a presentation to the Work Groups, et cetera.

Does that help?

Member Ziemer: Yeah. This is Ziemer again. Yeah, that's helpful. I'm looking for the responses. Are they in with the public comments document?

I'm looking at the comments.

Dr. Roberts: Yeah.

Dr. Taulbee: No, the comments are sent just to the Board. We have not -- in the past, we have not typically published these, I don't think.

Mr. Rutherford: No.

Dr. Taulbee: Bomber, would you agree?

Mr. Rutherford: Yeah. Yeah, these are not published. We do provide the responses back to the Advisory Board and then normally the Designated Federal Official will distribute the comment with the responses by NIOSH to the other Board Members.

Dr. Roberts: Right, and that was done. It was distributed in the materials for this meeting.

Member Beach: Well, I think that --

Dr. Roberts: So --

Member Beach: This is Josie, that the chairs of the various Work Groups will look at those and determine if they need further discussion during a Work Group. Isn't that --

Member Ziemer: Right, right.

Member Beach: Oh, okay.

Member Rutherford: That's correct.

Dr. Roberts: Okay, well since we've started down this path, what I'll just say is, you know, there were several other comments provided by the commenter on Santa Susanna and DeSoto.

And there have been responses, I guess, that the Board can review and the Work Group chairs can decide what they think should happen with this.

So how about if we leave it at that?

Member Anderson: That sounds good.

Member Ziemer: Yeah.

Dr. Roberts: Okay.

Member Ziemer: Yeah, this is Paul. I think we don't need to read them all through. I think just knowing they've been handled is the main thing here.

Dr. Roberts: Okay. Yeah, and it certainly looks like there were responses for the remaining comments. So you all can review that as appropriate.

So that, I think, ends the Board work session. And we have, I think we can do the SEC Petitions update, I want to say, on the schedule for about 2:45 -- I lost my agenda.

Member Beach: That's correct on that schedule you've got.

Dr. Roberts: Okay. Did you want to take a break

until then and then we can come back and get started again at 2:45?

Member Beach: So do that one and then just take a little longer break, because our --

Member Ziemer: A little longer break?

Member Beach: Yeah, our schedule's right --

Dr. Roberts: Anyone? Okay. Is there any objection to going into the --

Member Anderson: As long as LaVon is on, let's do it. Yeah.

Mr. Rutherford: Yes, I'm on.

Member Anderson: Sounds fine to me.

Mr. Rutherford: Dr. Melius, if you remember, used to just pick times and just throw me up there, so I'm certainly ready.

Dr. Roberts: Okay. Well, the floor is yours.

### SEC Update

Mr. Rutherford: All right, this is LaVon Rutherford. I'm the Special Exposure Cohort Health Physics team leader for NIOSH. And I'm going to give you the SEC update.

Okay, Slide 2, I see Grady's got that up there already. We provide that update to the Advisory Board to prepare for future Work Group meetings, Board meetings, such and such.

During this presentation, I'll talk about petitions and qualification, under evaluation currently under Advisory Board review and potential 83.14 SEC petitions. Next slide. Okay.

A little summary, to date we've had 257 petitions. That included 5 petitions we received prior to the rule being promulgated. We have 2 petitions in qualification and we have no new petition

evaluations going on right now.

We do have evaluations going on, but no new ones. We have 11 reports with the Advisory Board. Next slide, please.

Okay, petitions in qualification: Pinellas Plant. We actually received this petition prior to the pandemic kind of kicking in. And during that process, the petitioner, actually, in response to some clarification and deficiencies that were noted, had scheduled some interviews and ended up asking us for a couple of extensions.

So we granted those extensions, obviously. Back up, Grady. You shot forward on me. And, however, she did just respond to the final thing, and so we do anticipate qualification determination to being done in September.

This is for all employees and it covers the entire covered years at Pinellas, so 1957 through 1997. Next slide.

The Rocky Flats petition, we have this one in qualification. This is for the 1984 through 1989 period. We did make a determination. However, as you may have heard yesterday during public comments, that an administrative review has been requested.

We do anticipate that, just based on the requirements set before that administrative review panel that we will get a decision on that sometime later in September.

Okay, petitions under evaluation: Lawrence Livermore National Lab. This is a petition that actually addressed the remaining years of a petition. We're going to complete an addendum that covers the 1990 through 2014 period.

We anticipated having this done some time ago. We actually did our internal, face-to-face on the evaluation where we kind of go over our thoughts.

And, Grady, that's moving forward on me again.

And during that time period, we identified an issue that we wanted to review a little further. So we actually requested a set up to do a data capture at Lawrence Livermore.

However, during the pandemic, things got shut done and we have not been able to get on site yet. I put up the date of December 2020 only because that's the next Board meeting date and I have no idea, really, for sure, when we're going to be able to get back on the site to complete this.

Next slide please. Y-12 Plant, we heard a little bit about that in last night's public comment. And we have been evaluating the 1987 through 1994 period. We did -- we had hoped to have that addendum ready for this meeting.

However, as I mentioned during the Board conference call and it was noted again during public comment last night, we did have a data issue that we needed to address. We have addressed that data issue and we're moving forward with the evaluation. And we anticipate that the -- to have that completed in October, ready for the December Board meeting.

Next slide. All right, these are petitions that are under Advisory Board review. Hanford, we just heard about that one.

And Savannah River site, yeah, we've been working for some time back and forth, groups working to resolve issues with SC&A and the Work Group, and that continues.

Los Alamos National Lab, this is the site that we have kind of been stuck with the issue with the pandemic as well. We had developed a couple of approaches.

We're reviewing an RWP analysis and analyzing mixed fission and activation products. The RWP

analysis required us to retrieve RWPs from the site. We had a number of RWPs in-hand and started coding that data and downloading that data.

However, we've been waiting for RWPs and some survey data to finalize both analyses. We've been back and forth, talking with DOE, not only DOE headquarters but also DOE representatives at LANL trying to get this moving forward.

But I can't really give you a good date when that's going to happen. Their staff is kind of backlogged and the problem that Greg Lewis mentioned yesterday with the Classification Office seems to be the major issue.

Sandia National Lab, as you just heard from the Work Group updates, we did get the finalized interviews and that one can move forward. Next slide.

INL, I think an update's scheduled for later today. I'll leave it at that.

ANL-West, we've been working to resolve issues with SC&A and the Work Group.

Area IV Santa Susanna, this is -- we did receive some additional information. We have reviewed that. SC&A is reviewing that information as well, has been tasked by the Work Group.

Metals and Controls, as Josie had mentioned, we do have a Work Group meeting next week. Next slide.

DeSoto Avenue Facility, again, SC&A is reviewing information submitted by the petitioner. We have already looked at that information and we'll be ready for a Work Group meeting to discuss that. And we're also working to provide some clarification on a few remaining issues.

Superior Steel was discussed yesterday.

And Reduction Pilot Plant, this is a new petition evaluation that we just completed. We will make our



presentation later today.

All right, these next couple of slides are just identification of the years that are remaining. If you look at Hanford, Hanford covered from the beginning of operations all the way up to 1990, so that was a very broad petition evaluation.

Savannah River site was basically the same thing. That's why those two have been on this for such a long time.

LANL, we've ultimately added classes all the way up through, up to '96 and we're still evaluating that '96 through 2005 period.

Sandia, we still have the remaining four or remaining 1997 through 2011. We're working through INL. It's a pretty large period. Next slide.

No apologies necessary, Grady. I must have put a timer on there for something and I didn't even realize I did it.

Lawrence Livermore National Lab, you can see the remaining years there.

ANL-West, again, all of these -- these are the remaining years to be addressed by that petition. And that's good. Next slide.

All right, those will remember that West Valley, we'd actually added a Class from 1969 through 1973 at West Valley. And we had left the 1966 through 1968 period open because we had identified a significant number of data during that period that we questioned whether we should be adding a Class there.

We committed some time ago, when we added that Class, to continue our evaluation of that period. We're about done with that evaluation. I anticipate we'll be able to make a decision one way or the other on that very soon.

We do not have any other 83.14s really set up at

this time. And that is all I've got. Questions?

Member Ziemer: This is Paul. I have a question on Pinellas.

Mr. Rutherford: Yes.

Member Ziemer: Did we have a previous SEC petition for Pinellas?

Mr. Rutherford: We have had a number of petitions for Pinellas that had not qualified. We also had -- yes, actually, roughly, off the top of my head, four or five.

We have also had a Site Profile review that was done by SC&A. The review went through, all the way through to completion to the advisory board approving that Site Profile.

Member Ziemer: Is --

(Audio interference)

Mr. Rutherford: There's some differences in this petition. I will say there's a number of things that are the same, but there are some differences that --

Member Ziemer: Oh, okay.

Mr. Rutherford: -- we're taking a look at right now.

Member Ziemer: Okay.

Mr. Rutherford: And there were some additional interviews that were done for this one as well, so.

Member Ziemer: Okay. Thank you.

Mr. Rutherford: Mm-hmm.

Ms. Naylor: Hi, this is Jenny Naylor with HHS OGC. I just have one correction for the record, that the administrative review for the Rocky Flats SEC petition 257 will likely be done by late October if not late September.

Mr. Rutherford: Thank, Jenny. I was putting pressure on them, wasn't I?

Dr. Roberts: Any other questions or comments? Okay, I don't hear anything. Thank you, LaVon.

Mr. Rutherford: Okay.

Dr. Roberts: So it looks like there was a desire for a longer break, and it looks like that wish is going to be met.

So taking everything in, I'm wondering if we could take a longer break from 2:45 to about 4:10 p.m. with the idea of picking up with INL at 4:15. How does that sound?

Member Anderson: Sounds good.

Member Ziemer: Well, I'd like to ask whether we need that long of a break. Do we have petitioners that are tied into the 4:15 time for that or for Reduction Pilot Plant? Because if we don't, I don't see a reason why we shouldn't go ahead with it after maybe a 30-minute break.

Dr. Roberts: Okay, for INL --

Member Ziemer: Go ahead.

Dr. Roberts: -- we're going to take -- okay, I didn't see anything on the agenda for the petitioners. It's an update on INL.

But for RPP, yes. I think we would need to wait for the petitioners on that one, potentially.

Member Kotelchuck: Well, yeah. If we have to wait for petitioners, then it doesn't matter whether we start at 4:15 with INL or 5:30 with Reduction Pilot Plant.

So, the question is to take the big break now or later, after INL. I would just say let's take the longer break now and come back at 4:15 for INL.

Because really because of the reduction plant petitioners. What do others think?

Member Anderson: Sounds good.

Dr. Taulbee: That was what I was going to recommend as well because we do try -- well, active SEC petitions, we try to stick to the schedule in case petitioners wanted to dial in at that particular time.

Member Anderson: Even if they haven't pre-signed up, so, yeah.

Dr. Taulbee: Yeah, that's true.

Dr. Roberts: Okay, great. Okay, so we'll take a break now and I would just ask just a couple of minutes before 4:15 so I can do a quick roll call and then we can start right at 4:15 for INL. Sound good?

Member Kotelchuck: Good.

Member Beach: Sounds good.

Dr. Roberts: Great. See you soon.

(Whereupon, the above-entitled matter went off the record at 2:47 p.m. and resumed at 4:17 p.m.)

Dr. Roberts: Okay. All right. Great. I think we can go ahead and move on. And Phil, for those of you who may not have heard, needed to disconnect from the meeting. He's having some issues. And he had asked Mr. Bob Barton to present on his behalf. I see that the slides are up, so without further ado, I'll hand it over to you, Bob.

#### Idaho National Laboratory Update

Mr. Barton: Thank you, Dr. Roberts. Good afternoon everyone. As mentioned, Phil asked me to step in. It was more like I begged him to be able to give this presentation. So it's all good.

So we're basically doing an update here for the

INL/ANL-West Work Group. We all met last month on July 16th, which was the first work group since, I believe, March of 2019. And what we're all going to discuss right now is a V&V study that SC&A did related to the 83.14 definition for the Chemical Processing Plant, which is 1975 to 1980.

And this is really the, there were discussions on multiple fronts during that July meeting, but this is really what I guess would be considered an actionable item by the Board, if that's the correct terminology. So I'll be giving this presentation and hopefully you can all see the title slide, it should be up there.

And I'm going to move onto the first slide, which is the background. Hopefully all of you can see that. So, I think a little bit of history to the site and, in particular, the Chemical Processing Plant might be helpful to put this in a little bit of context. This 83.14 period again, goes from 1975 to 1980, is actually the third SEC period established for the Chemical Processing Plant.

The first two periods, the first one was from 1963 into early 1970. The second period was from early 1970 through 1974. And of course the period we're discussing right now is from 1975 through 1980. Now, the reason it's split up into these three periods, they're really delineated by what the external badging requirements were associated with being included in the Class.

That very first period, which again, the first two periods were part of SEC 219, required that you had a specific dosimetry badge for the Chemical Processing Plant at the time at INL, essentially you could work in one area, say Test Area North, or Central Facilities, and if you left that area, you would leave your dosimetry badge at that area. And then as you entered another area, such as the Chemical Processing Plant, you would have to pick up a specific badge for that area.

And that's very similar to the period we're

discussing now, this 83.14 period. So keep that in mind as sort of a precedent. Now in that middle period from '70 to '74, policies changed at the site briefly. So that window where you could actually take your badge from Central Facilities and enter any other facility at INL. You didn't have to leave your badge and pick up a new one. So that's why it's sort of split up.

It's all the Chemical Processing Plant from '63 through '80, but it's split up into three periods based on that badging requirement. So a lot of what we're going to be talking about today is the fact that, for this period, it switched back to where you had to have a specific dosimetry badge for the Chemical Processing Plant to be included as part of the Class.

Now, this Class has already actually been approved by the Board. It was back in 2017. So there's nothing being held up by this discussion, but really the question was the Class definition itself and that requirement that you had to have a specific badge associated CPP to be considered as part of the SEC Class.

Moving on. So again, for the first SEC period that we looked at, and this, again, was a number of years ago. It's that badging requirement that initially gave the Work Group and the Board as a whole some pause because it's somewhat unusual to require that you have to have that specific dosimetry badge. And this includes not only a regular routine badge, but also temporary badges or visitor badges. Any sort of dosimetry badge would get you included in the Class, but the Work Group wanted to make sure that, really, that no one would get inadvertently excluded.

Now, we've learned some things from that first evaluation, which again, is very similar to what we're discussing today. It was discovered that if you were issued a temporary badge or a visitor badge, unless you actually accrued a positive dose on that

badge, at the time the site INL was not actually indexing that badge so that it could be correctly associated with the Energy Employee.

So essentially what would happen is you'd make a request, as we usually do through this program, for dosimetry records for an individual and unless those temporary badges had a positive reading, they weren't being correctly included in the claimant's file. Now obviously this is a problem from a dose reconstruction standpoint because those would represent missed doses. But even more problematic from an SEC adjudication standpoint, because if we're missing, we're not associating those temporary badges with the claimant, they could be inadvertently missed. And obviously that would be a terrible thing.

So this is going back a number of years but back in 2016 after this was discovered, that these essentially zero badges were being excluded, DOE and INL went back and they actually performed a massive coding and indexing effort to take all those temporary badges, all the ones that were zeroed out, even if they didn't have positive entries, and indexed them into their system so that now, when you made a request for a given claimant's dosimetry record, all those badges should be included. So they wouldn't be missed and if you were looking to find that badge, to make sure that a specific worker could be included in the Class, because they entered the Chemical Processing Plant, those should all be correctly ascribed to the claim.

So all that kind of happened back in 2016. The Work Group still had some concerns about that though because back then, and we're talking about in the 60's, that first SEC period, the temporary badges were mostly handwritten on little cards that were a little bit smaller than a credit card. And really the only identifying information at that time was generally just the name of the Energy Employee and their employer.

Now fast forward to this period where, again, we're still requiring that you have that CPP-specific badge, things got a little bit better. The temporary badges were actually typed out on these little cards instead of being handwritten. So you, a lot of the legibility issues were lessened. And also during this period, they were using what's called an S number, a Security Number, which is just another piece of identifying information.

So during the period we're talking about now, a lot of the original concerns with the class definition, again, back in the evaluating SEC-00219, were certainly lessened. Legibility issues were down but there's still some concerns about, you know, you might have people with the same name that might get confused. You know, other types of human error. Hard copy records are scanned and sometimes the typing might be faded, or other types of legibility issues. Name misspellings, et cetera. So these are sort of the concerns that brought about this verification and validation study.

And again, the key question here is, is it possible or what is the potential that we could inadvertently exclude someone from the Class due to the badging requirement that is part of the Class definition?

Moving on. So to this end, SC&A developed a V&V strategy for this period. Again, we're talking now about '75 to 1980. That is very similar to the one performed, again, earlier, for the earlier period under SEC-00219. And it's pretty simple in concept. We identified claimants who had temporary badges that were currently missing from their dosimetry file. And they were missing from the dosimetry file that had been sent to us prior to this massive coding and indexing effort that DOE and INL did, again, back in 2016.

So how do we know that they're missing? Well, NIOSH and SC&A together went out to Idaho Falls. This was back in the fall of 2018, and we actually captured all these hard copies of visitor badges. We



scanned them all in and again, they're kind of small cards. A bit smaller than a credit card. And once we had all those, it was simply a matter of going in and cross-referencing them against the claimant population that we had.

So we have the hard copy visitor cards and can say, all right, we know this person entered CPP on such and such a date. Let's look in their claim file to see what DOE had sent us prior to this massive coding effort in 2016 and we'll see if it's missing. And if it's missing, then that person could potentially become part of this group of workers on which we're going to do this V&V evaluation.

And once we had the group of workers, essentially it's just a question of re-requesting dosimetry records from the site. And these should be updated now to include all those temporary badges that had previously been excluded because they had shown no measurable dose.

So our V&V population consisted of 37 claimants with a total of 736 temporary/visitor badges between them. You might be asking why 37. It seems like rather an odd number. Well, seven of those were actually claims that we used in the earlier V&V evaluation, under SEC-00219. We just hadn't evaluated them for this later period. So it was a question of simply going back and checking those records on our end. We didn't require DOE to actually go and do any further research.

So that's why there's the seven extras and 30 claims were selected as new claims that we would send back to DOE/INL to have their dosimetry files researched.

Now, the only thing that's slightly different about this evaluation from the previous V&V evaluation is this one is really a twofold evaluation. We're not only going to test what comes back from DOE and INL, and what they're sending us with the updated dosimetry files, but we also have a secondary source that we checked. And this is known as

NIOSH hot-linking, or at least that's how we know it at SC&A.

And essentially what this is, and I hope I don't bungle this too much, but hot-linking is essentially the process where when NIOSH captures records out at a given data cache or at a site and they have a claimant's name associated with it, and the document is germane to dose reconstruction, it's essentially automatically linked to the claim file so that it can be used in the DR process.

So this is a secondary sort of mode of applying these records to a claimant. You can look at it as almost a safety net, if you will. So even if DOE happen to miss a record in the updated file, there's a very good chance that it would be picked up through this hot-linking process. And thus, the claim would have the requisite evidence to be included in the SEC.

So we evaluated both those avenues as separate entities, but then also sort of the combined effect of all of them. So again, the question here is what is the potential that we might miss somebody because of this dosimetry requirement.

So what we're looking at now is the actual results of the V&V analysis. As you can see, we have our 736 total badges that SC&A identified for checking. Again, these were originally omitted from the claim files we had to look at. And so we're going to go back in and look at the updated files and see, well, how many of them are now correctly included?

So this second row here. It says V&V badges identified by INL/DOE. So that's the standard request process. We found our group of workers who we really wanted to test out through this V&V exercise, and we sent requests back to the site for an updated dosimetry file. And the results were that out of those 736 badges that we had identified to check, 602 came back as correctly included, which is roughly 82 percent. So that's about an 82 percent, I guess, a positive rate, if you will.

Now that's actually somewhat low compared to what we found for the previous V&V evaluation, which is surprising for the reasons I stated. In the previous period, there were handwritten records. They didn't have that third piece of information, the S number.

In the first V&V evaluation, we actually had more, close to 95 percent success rate. So this is, this is a little bit lower. But as you'll see, as it washes out in the end, it's actually very close to what was found to be acceptable for SEC-00219.

The row below that is the hot-linking process that NIOSH does automatically. They did not do this specifically for INL or for this V&V application, it's just a standard process that they've instituted programmatically. And again, we evaluated that separately and that one came out slightly higher than the DOE request. We had 613 of the 736 identified badges, which is about 83 percent success rate overall.

Now, if you take them in combination, in other words, if we look at both of them, what DOE returned and what NIOSH has hot-linked into the file, the combined effort for both of those was about 93 percent. So 682 out of 736. So that 93 percent could be compared to the previous V&V study that was done for SEC-00219, which again, I think it was 94.5 percent success rate in the previous effort.

Now, some key take-aways from here, when you look at the group of 37 as a whole, three of the claims came back in which it did not get any of the temporary badges from DOE. Now this first bullet talks about two of them. Where DOE, again, did not return any of the badges that we had identified as associated with the claimant. For those, for two of them, we really could not determine what the root cause was. Why we were getting files back from DOE that just didn't contain those temporary badges we had identified.

However, that secondary source, the NIOSH hot-

linking process, which again, is a separate entity in itself, for these two cases, correctly identified 90 percent and 100 percent of the badges for those two cases. So even though DOE seemingly missed it, the NIOSH hot-linking process, again, was that sort of safety net. So the claim would still qualify just based on that because the NIOSH system itself identified the badges to allow for the claimant to be included in the SEC Class.

And that was for two of them. As I mentioned, three of them came back from DOE without the identified badges. The one additional claim I show here in this second bullet, you know, we were able to trace the mistake an incorrect Social Security number that was used in the research done by the site. The request was correctly made and assigned NIOSH with the correct information and the correct Social Security number, but when the site went in to do the research on the claim, they found, essentially, a claimant with the same name but a different Social Security number, and thus sent back the wrong dosimetry file.

And I guess the third real key take-away to this entire exercise is that for those 37 claims that we included in this entire V&V study, 36 out of 37 contained at least one of those SC&A identified badges shows that they would not have been inadvertently omitted from the SEC Class, were this not just an exercise, but the real functioning of the program.

And again, that one case that we identified that was a problem with the Social Security number used to search for that claim. And unfortunately, for that specific claim, the NIOSH hot-linking process had not been performed. And I believe that was probably because of the age of the claim. In other words, this hot-linking process has sort of developed over the years in the program and I think this case itself had already been decided prior to this process really being implemented. So it just -- it had never, the hot-linking process had not been

associated with this claim, likely because it had not been active at the time. That is my own supposition but I think it's a logical step to make.

So in conclusion, at that July 16th meeting, last month, we presented the results of this V&V study. Again, we have about a 92 percent or 93 percent success rate between the NIOSH hot-linking process and DOE record searches as a whole. And based on that, the Work Group determined that the process is sufficient and that claimants are unlikely to be inadvertently missed by the class definition.

And again, all you need is a single badge. It doesn't have to be a badge covering 250 days of employment. You do need 250 days of employment at the site, but only a single dosimeter badge for the Chemical Processing Plant to be included in the Class.

So the Work Group recommends that the SEC-00238 dosimetry requirement that's part of the Class is sufficient and does not need modification. And as I stated earlier, this Class has already been approved by the Board. It was just a question of whether any modification needed to be made because of that dosimetry requirement that was part of the criteria.

So the Work Group recommends that things stay as they are and that the dosimetry requirement is okay. And that the chances of inadvertently missing someone are small enough. So any sort of expansion of the Class, which the only expansion you could really make is to say, well, anyone who had a badge at INL. That would be the next step beyond what is currently in the Class definition. The Work Group recommends that things simply remain as they are.

So that is my presentation regarding the V&V activities for SEC-00238, which was again, at 83.14, which means NIOSH initiated the SEC Class themselves after seeing a deficiency, or an infeasibility in monitoring for the Chemical

Processing Plant from '75 up through 1980. That's the end of my presentation. If there are any questions, I'd be happy to field them.

Member Beach: Bob, this is Josie, you've stunned us into silence. Good job on the presentation.

Mr. Barton: Thank you, Josie. I thought I might have got disconnected there. Talking to myself.

Dr. Roberts: Any questions for Bob?

Member Valerio: This is Loretta, I have a question. Can you hear me all right?

Mr. Barton: Yes, please.

Member Valerio: So when you were going through these records, these index cards, did -- by chance, did you come across any visitor badges for someone who was visiting from a different site other than INL? Do you recall?

Mr. Barton: I'm quite sure, I'm quite sure we did. I don't think the visitor badge itself would have necessarily indicated that, unless it was perhaps the employer might have indicated that the person was visiting from another site. But I can't say offhand.

I can say that before we even undertook this exercise, before even designing the V&V and coming up with this group of 37 markers, we took a close look at those visitor cards, including seeing if there were any temporal gaps, you know, if you had a couple of months where there's just no visitor cards. That would be a big red flag that we hadn't actually captured the full set. Unfortunately, you know, if you're going to do a completeness study, the primary reference that you'd like to have would be a health physics report, or something of that that actually lists the number of temporary badges given in a certain period. We didn't have that information.

But again, we looked at it on a temporal scale by month and it was fairly consistent. And they issued

a lot of temporary badges at the Chemical Processing Plant in some months, you know, over 1,000 visitor badges in a given month. There were a lot of people coming in and out including, I mean, even the worker restocking the Coke machine got a temporary badge and you can see that. Or someone doing maintenance on the telephone lines. They all got temporary badges.

So it really did run, as far as identifying specific -- circle back to your question. Identifying specific workers from other sites that certainly came through to visit the Chemical Processing Plant. I can't say specifically how many, or really give you any more information on that.

I can say that the policy at the time would have dictated that, for example, if somebody was coming from a different site, they wouldn't be able to just take their site film badge and walk into the Chemical Processing Plant. They would have had to stop at the guard gate and gotten a visitor badge. That was just the policy at the time.

(Simultaneous speaking.)

Member Valerio: All right. Thank you.

Dr. Taulbee: This is Tim Taulbee --

Member Valerio: Thank you.

Dr. Taulbee: Oh. Loretta, just to follow on just briefly here. We have looked at some of those and Bob is correct. We haven't done any study as to how many people came from other sites. But I have seen other sites listed that they came from, Y-12 or from Los Alamos or from other sites. It depended upon what they put down in their contractor, or their employer spot on that particular badge. So we do see that sometimes on those badges.

Member Valerio: All right. Thank you for the clarification.

Dr. Roberts: Any other questions? Okay. I don't hear any. I don't know if someone was getting ready to ask something but I realize this is on the agenda as an update on INL. But I'm wondering if it would be appropriate if there were, you know, people who want to make comments or petitioners who may be on the line who want to present or discuss anything.

Okay. Hearing none, my next question, I know Phil is not here, but I wanted to ask the Work Group, was there a motion you wanted to bring?

Mr. Barton: This is Bob Barton. Maybe I might have misspoke. I did say actionable item. I think, I mean really, the SEC Class as currently written has been accepted. So I guess if there was a motion, it would be a motion of no action, really. Because the task here was to look into whether the class definition needed to be changed, and the recommendation from the Work Group is that it does not.

So I'm not sure, and Dr. Ziemer, you might know the Robert's Rules on this, if we need a motion of no motion. Or I'm not sure how that works. But the, again, the Work Group recommendation was to essentially leave the class definition as is.

Member Ziemer: Under Robert's Rules, if there's no change, you don't need to take any actions.

Dr. Roberts: Okay. So we'll just leave it there then. Is that agreeable to the Work Group?

Member Beach: Yes. It is. This is Josie.

Dr. Roberts: Okay. Great. Well, it seems like we have another gap in time with the RPP being presented at 5:30. Would we like to take a break until then?

Member Kotelchuck: Okay.

Dr. Roberts: Why don't we go ahead and, you know, maybe just come in a few minutes before 5:30 so



that we can open up that agenda item at 5:30. All right? So see you soon.

(Whereupon, the above-entitled matter went off the record at 4:43 p.m. and resumed at 5:39 p.m.)

Dr. Roberts: Okay. Since you're here, Andy we're going to go ahead and move into our final agenda item.

Member Kotelchuck: Hello.

Dr. Roberts: And -- okay. And that is for RPP so since we're a little bit delayed, I'll just turn it over to you.

Member Kotelchuck: Hello. Hi.

Dr. Roberts: Oh, hi. You're here.

Member Kotelchuck: Hi.

Dr. Roberts: Hi Dave.

Member Kotelchuck: I'm terribly sorry. I'm so glad you got in. Thank you for waiting as long as you did. Someone called me and I'm so sorry I'm late. Please go ahead.

Dr. Roberts: Not at all. Thank you so much. I was just turning the floor over to Tom. Is it Tomes? Am I saying that correctly? I'm sorry?

Member Anderson: No, we've lost him.

Dr. Roberts: Oh no.

Member Ziemer: He may be on mute.

Dr. Roberts: Okay. Tom, if you're on mute, you need to come off. We can't hear you.

Mr. Calhoun: Oh bot, this is not good.

Dr. Roberts: We were doing so well. Tom?

Dr. Taulbee: Tom, if you're trying getting him on

through Skype? Through Skype and you selected Don't Join Audio, you need to dial in on the, on the cell number that was provided.

Mr. Tomes: Hello, Dr. Roberts. Can you hear me?

Dr. Roberts: Yes. I can hear.

Mr. Tomes: I'm sorry that --

Dr. Roberts: Wonderful.

Member Kotelchuck: Hello.

Mr. Tomes: I tried to unmute my phone but I guess --

(Simultaneous speaking.)

Dr. Roberts: Yes. That happened to me earlier. Well, it's your floor. Thank you so much for presenting in advance.

#### Reduction Pilot Plant SEC Reduction 253

Mr. Tomes: Okay. Thank you. I'm here to present the high oxidization of SEC petition 00253 to add a class of employees in the Reduction Pilot Plant to the Special Exposure cohort.

Next slide, please. The presentation here is divided up into five sections. First I'll go through the overview of the site and the petitions. Then I'll go through the information that NIOSH used in the evaluation of the petition. Then I'll go through the basic operations of the Reduction Pilot Plant, followed by the method that we can use to reconstruct doses. And lastly, I conclude with the feasibility summary.

The Reduction Pilot Plant, which I'll refer to as RPP throughout the presentation, is located in Huntington, West Virginia. That's a picture of the site there from the operations period in the 1960s. The site was operated by International Nickel Company, also known as INCO. The facility was

owned by the Department of Energy, which built the facility on the ground adjacent and surrounded by the nickel company.

INCO was also known as Huntington Alloy Works, which you'll see in various documents that we researched. INCO ran the company and later sold it to Special Metal Products. I believe that was in the 90s where you'll see all those names and various records.

The RPP manufactured nickel powder for use in the gaseous diffusion plants. Covered periods of the facility is 1951 to May 18th, 1979. The period of November 27th, 1978 through 1979 for remediation, in which time the period, the facility was demolished. And Cleveland Wrecking Company was the contractor for the demolition.

The facility was located on approximately a three and a half acre fenced area adjacent to the INCO plant. INCO acquired the property and so did the DOE, and then DOE subsequently contracted INCO to build and run the facility. The facility started operations in 1951. The facility was separated from the rest of INCO's operations by a security fence and security clearances were required for entry. And it was manned by government guards at the time.

The operations included the use of low enriched uranium-contaminated nickel scrap, which was supplied by the Department of Energy. The facility operated until 1963, at which time it was shut down and placed into Standby. The facility remained in Standby until 1978 through '79, when it was demolished.

Next slide. NIOSH received SEC Petition 00253 on June 25th, 2019. The requested SEC Class is all INCO security personnel who worked at any location within the Reduction Pilot Plan during the period from June 7th, 1976 through November 26th, 1978. As noted on the previous slide, the period is fully within the Standby period. This was significant because the Standby period was not listed as a

covered period under EEOICPA when NIOSH received the petition.

NIOSH talked with the petitioner and reviewed the records from the petitioner, and at the request of the petitioner, we contacted Department of Labor and provided more information to the Department of Labor, and asked them to review, at petitioner's request, that facility should be covered during the Standby period. There were records provided by the petitioner of security personal who had security clearance at the time, who made daily entries for inspection purposes.

NIOSH also had information in this database that INCO's was contracted for maintenance during the Standby period. Subsequently, in November, the Department of Labor notified NIOSH the Standby period was being added to a covered facility period. And NIOSH qualified the petition in December of 2019 on the basis that we had no radiation exposure records for the requested class so it qualified on the F-1 basis.

NIOSH subsequently evaluated the plant as they requested and issued an ER, Evaluation Report, on April 24th of this year. NIOSH concluded that we have sufficient information to reconstruct doses with sufficient accuracy for members of the requested class.

Now we'll go into some details on the source of the data for this evaluation. There's a Site Profile for the RPP, however that Site Profile was written before the Standby period was added to the Class, to the covered period. But the Site Profile does provide information on operations of the plant and some information on the ventilation for all of the Standby period.

We also looked at the Site Profiles for Atomic Weapons Employers that worked uranium metal, TBD-6000. That was consulted for source of exposure from uranium. And we also used the Oak Ridge Gaseous Diffusion Plant, legal basis document

for a reference for recycled uranium components and uranium that would have been present in the RPP.

Next slide. NIOSH also looked at the claims in our tracking system, NOCTS, as of March 17th. There were 77 total claims submitted for dose reconstruction for the site. Excuse me, there were 92 claims submitted to dose reconstruction, 15 were pulled by the Department of Labor, and so we completed 77 of those. Of those 77, 76 had found dose reconstructions and one was pulled.

Next slide. The number of claims that was submitted for energy employees who worked during the period under evaluation was 42 and 42 claims had employment from June '76 to November '78. And there were four claims of workers who started during that period. NIOSH looked at all those records. We found no claims that had radiation dose records, for either internal or external doses.

Next slide please. NIOSH reviewed documents provided by the petitioner. Petitioner submitted documents supporting the claim of the security personnel and the RPP during the period in question. And they were not monitored for radiation exposures. Documentation was provided by INCO via the petitioner to show the determination of security clearance for those workers after the RPP had been demolished.

NIOSH also made attempts to find workers who worked in the period during the time, and we found only one worker who we could interview to try to get information. The interview of that worker. The information he could provide was that he had a concern that workers entered into the building and were not monitored.

Other sources of information was (Audio interference) NIOSH site research database, existing documents for review, and then an extensive search was performed for the various records that we typically search and that data search record is

documented in the ER in Attachment 1. In total, between the records that we had and the new records we obtained during the search, 287 documents were reviewed.

Next slide. I'll discuss the RPP operations. We have some background on the period under the evaluation. The RPP employed 20 to 25 people during the production period, including operators on the various shifts and security personnel. The facility consisted of a process building, a compressor building, and storage tanks. The facility had initially used nickel oxide supplied by INCO as the feed material to produce nickel powder for the AEC. Contaminated nickel scrap was later introduced as a starting material starting in 1956.

And this is a picture of the facility. There's a sketch that shows the layout of the RPP facility, and there's a picture of the facility from 1963, which is the same picture that was included in Slide 4. Just to go through what these pictures represent, the layout and the sketch. The large rectangle area is a Process Building where the radioactive material would have been processed and that is the large five story building seen in the background of the picture.

The other large rectangular building near the center of the sketch was the compressor building, with no radioactive materials entered that building. There's a gas cracking plant in between those two large buildings to produce carbon monoxide and hydrogen gas using the process. And on the right side of the sketch are the four holding tanks that you see in the picture on the right, which were used to hold carbon monoxide, used in the process.

Next picture. I'll briefly discuss the process that INCO used to produce nickel just for some background on the facility. Nickel oxide is combined with hydrogen gas to produce nickel metal and water. This was a starter material that was used up through 1950 through '56, approximately. When

INCO switched from using nickel oxide that they supplied, they were using scrap metal from the AEC in 1956 to '57 era. Step one had to be changed. They made a modification to this step as that process result was the same.

The nickel was then combined with carbon monoxide to produce nickel carbonyl gas, which is a very poisonous gas. And then the nickel carbonyl gas is distilled to separate contaminants, heated, and then decomposed into pure nickel and carbon monoxide. That is the basic process that's probably not in the scope of the presentation here, but I just wanted to give you some background on what the facility did.

Next slide, please. The AEC had a large supply of scrap nickel that had been building over a period of years and starting in 1956, they began experimental steps, introduced that nickel into the RPP as a source of feed. They initially started using small quantities for test purposes. The facility was set up in parallel lines so there could be multiple batches at the same time.

They initially started with one line, but the scrap did up the process and they eventually converted all the lines, starting in 1957, to use exclusively the AEC material. The nickel supplied INCO by AEC was guaranteed to have no more than 0.0870 grams per pound of U-235, and no more than 500 parts per million total uranium. Later data showed that the actual numbers were much lower than that.

The AEC also notified INCO that the material would have trace quantities of typical contaminants that's found in recycled uranium. Because this material had -- some of this material was contaminated, had been through the enrichment process at the gaseous diffusion plants.

Next slide. During the process, the uranium does not form a carbonyl. There are other contaminants in the nickel, such as iron principally, that is removed in the distillation process. The uranium

does not form any carbonyl compound that's removed in the second step, and falls out at the residue. When INCO converted their systems over to handle the scrap, they also upgraded their residue handling system to catch the ash in the receivers in the residue system. This was an inert system. It was handled inertly through vacuum and the residue that resulted from each batch that was processed was collected in drums and sent back to AEC.

The facility operated until 1963. I don't have the exact amount of material processed through there, but at one point in 1960, they recorded over nine million pounds of scrap nickel had been processed in the facility. When they started to shut down in 1963, the intention was to keep in condition so it could be reopened if it was necessary. The systems were purged. INCO was contracted, contract modification with INCO and they performed -- was scheduled to perform routine maintenance during the Standby period. There was a list of scheduled maintenance items, as well as security inspections.

In the latter part of the Standby period, the AEC did a security inspection and radiation survey. This was performed in January of 1975. Following that, the AEC terminated all maintenance requirements for the facility in March.

Next slide, please. Following shortly thereafter, the AEC gave permission to dispose of the facility and the buildings were disposed of by contractor, Cleveland Wrecking Company, between November 1978 and May 1979. The facility and all the equipment was segregated into contaminated and potentially contaminated materials and was sent to DOE sites for burial. There was a final survey after the demolition in 1979 followed by a more detailed survey after that.

Next slide, please. This is the timeline of the operation shown here on this slide. It may be hard to read but I'll summarize what this slide shows. It



shows that the RPP began operations in 1951. Contaminated scrap was introduced in the facility starting in 1956. The RPP was shut down in 1963 and maintained in Standby condition. In 1975, there's a mark on this timeline that shows when a survey was performed and maintenance was terminated at approximately the same time. It also shows the dates of the demolition and the surveys. And you'll notice that the two vertical dotted lines at the end is the period of the SEC requested Class which is after the surveys, the initial survey was performed and after maintenance was terminated.

The period under evaluation goes up through the end of, to the day before the V&V started. V&V was started on, I got my dates mixed up here. The requested Class fell through November 26th, 1978, and the demolition started the following day.

Next slide, please. The radiation exposures for the evaluated Class include potential internal exposure from alpha dose from uranium and also from contaminants from recycled uranium. And records indicate that the material was low-enriched uranium. And then records that we have after they processed nine million pounds of nickel scrap, they reported that the total uranium content of the residues, of the materials processed through there, was one percent with a U-235 content of about 0.9 percent.

And the recycled uranium components, we have no specific data on those so we relied on data from gaseous diffusion plants for that. External sources of dose, or photon dose, beta dose, there was no significant dose marked in view of references in TBD-6000 from the sources used at that site. We assume that medical x-rays are required because there's a lack of information specifically on x-rays.

Next slide, please. There's the data we have on the facility. This is results from the survey that was taken just a few months before the requested class. In January of 1955, there was a survey done of the,

specifically, the residue handling system and the areas that were known to have contacted uranium contaminants during the processing years. The alpha readings, the contact readings was the highest at 96 DPM/100 cm<sup>2</sup>. That was a direct reading. And the highest smear on those areas was 19 DPM/100 cm<sup>2</sup>.

Gamma dose readings taken in the Process Building, they were taken three feet above the floor and they found no elevated gamma readings without background. We should note that these, this particular survey was done in the winter, and they did not do outside areas at the time. They only did the buildings partly because of the weather. There was some snow, three inches of snow on the ground during the survey.

Well this particular survey just did the Process Buildings, and they called on INCO to identify areas where the material was actually held. The gamma dose readings that I already mentioned was not above background. It did do a beta-gamma dose rate readings on contact with the process residue system, and a couple of the phalanges, they had found in there, had a contact reading at 0.25 mR/hr, beta-gamma dose rate readings. And those smears were none detected for the beta-gamma.

Then upon demolition more detailed surveys were performed to include other areas of the site besides the Process Building. They confirmed the Process Buildings and they did surveys around the site. They found contact with the ground, with the floor surface at 45 microR/hr per contact reading. They subsequently sampled that and detected elevated levels of Ra-226, which they attribute to the naturally occurring radium materials.

They also found some elevated gamma readings at three feet in the Compressor Building. The highest readings were actually in the stairwell. They did some samples of those materials and included that those were elevated Ra-226 in the building where

material was used.

Next slide. NIOSH believe that estimating the intakes of uranium based on the smear data that contamination was found. We assume that the alpha activity is from uranium, so they calculated the uranium intake based on that result. They used that maximum smear result of 19 DPM/100 cm<sup>2</sup>, combined that with a factor of, resuspension factor 10 to the -6 per meter, and a 1.2 m<sup>3</sup>/hr breathing rate over a time period of exposure. We assumed that a worker would spend 15 minutes per day in the facility every day of the year to come up with 91.3 hours per year.

This is a, just an estimate of what he likely could have spent and that makes the intake of uranium 0.208 dpm/yr.

To allow for intakes of contaminants in the recycled uranium, we consulted with the K-25 ED Site Profile. It has values for uranium and the various contaminants in the recycled uranium, which is shown here in the table on this slide for low enriched uranium. These ratios were taken from internal intakes of the various nuclides.

Next slide. And this is the result from that table from the previous slide. They've taken 0.208 dpm/year of uranium and applied those ratios across these intakes of the radionuclides for inhalation.

Next slide. I'll go through the method here of how we estimate external photon dose for security personnel during the evaluated period. They had results of 8-10 microR/hr at three feet above the surface in the Process Building from the 1975 survey. It also had a high gamma reading on contact on the driveway from the 1980 survey. That was a contact reading, not a hold by exposure reading. But we also had a high gamma reading at 35 microR/hr in the Compressor Building in the 1980 survey. So these would be taken the highest three feet reading and multiplied it times the 91.3

hours estimated for time in the facility for the guard. It came out to 3.2 mR/yr gamma dose readings.

We've taken a similar approach for beta dose. In the 1975 survey, a full cassette survey for beta-gamma readings on the areas where the residue system was collected. And I had mentioned earlier that the highest contact reading was 0.25 mR/hr. That was the beta-gamma reading (Audio interference) data. And we took that value with hours estimated per year to come up with an annual beta dose of 23 mrad/year for contact. These are considered to be damaging doses, not necessarily those in the body.

Finally, I'll get to our summary of our findings. We've concluded that we can estimate internal dose from the uranium with sufficient accuracy, and the recycled contaminants as well. And we can estimate doses, gamma and beta dose with sufficient accuracy, as well as the medical x-ray dose. And that is it. Are there any questions?

Member Beach: Yes. Tom, this is Josie. I have a question. There -- I looked through the ER. There is not any claims for the operation or production period. Is there? This is the only SEC petition for this site. Is that correct?

Mr. Tomes: That's correct. Yes. And our evaluation was just for the period that was requested.

Member Beach: Yes. Did you look for any other claims or anything for this site?

Mr. Tomes: We've looked at every single claim. We reviewed every claim for data and for information. That table you saw in the slide was the number of claims, and I think the ER points this out, that that table doesn't consider the fact that during this evaluation process, the Class was extended to include the Standby period. So that data at some point, that data is dated already because at some point, DOL would return claims to us because of the period that was added to the Class.

Member Beach: Okay. That just seems unusual. And then I have one more question on, I think it was Slide 30, when you were talking about the Compressor Building.

Mr. Tomes: Yes.

Member Beach: Earlier in your presentation, you mentioned that there was nothing, no contamination or process in that building. I thought you were pretty clear about that. But then you talked about the three feet above the ground, that last bullet. Can you explain that a little bit? Or is that background? Or what's going on there?

Mr. Tomes: It's building materials background. That was the conclusion of the people who did the surveys and it was checked out by a couple of people at the time. And they sampled it and did an analysis of it and found slightly elevated Ra-226 in the building materials. And Ra-226 would not have been a contaminant concern in the scrap uranium that was sent to them from AEC. So there was no indication that it was from any process activity other than the building materials itself.

Member Beach: Thank you.

Mr. Tomes: Yes.

Member Field: Bill Field. I have a question on Slide 25. You're talking about alpha contamination readings, there was contact readings of 960 and the smears were 19. So what you're saying there is that the, there was contamination but it wasn't removable?

Mr. Tomes: Yes sir. It was contact with the alpha scintillation detector and then they smeared the locations of those.

Member Field: And then the other slide Estimating Internal Dose from Uranium, you have the maximum swipe sample of 17 DPM to estimate airborne radioactivity. How is the removable used to

predict airborne?

Mr. Tomes: The assumption is that is entirely -- it can become airborne from casual walking through the facility. And that material's there could potentially be resuspended in the air.

Member Field: Okay. I'm just, you know, there's just a lot of difference between removable and non-removable contamination. That's just -- I guess once it played it out, or deposited, the dosing is all removable over time. It just seems like it's funny that it's a static thing but it could be removed now. But it could have been removed a month ago. Just, you know, it's a small difference. I was just curious about that. Okay. Thank you.

Mr. Tomes: I will point out that most from this facility, that most of the smears were nothing. You know in single digits and they're very, very low.

Member Field: Right.

Member Field: Okay. Thanks.

Member Kotelchuck: Tom. Yes. Tom?

Mr. Tomes: Yes.

Member Kotelchuck: Dave Kotelchuck. On Slide 27, you said that the security inspection took 15 minutes a day. What was the basis of that? Was that the interview with the one person?

Mr. Tomes: There were several descriptions in that ER. I didn't write that down to include in the presentation. It was an assumption that we made of how long a person would logically spend going, walking through the facility. It admittedly, is not a firm number. It is a, I think we can down the doses. Admittedly 91.3 is a what we're just looking for as a reasonable number.

Member Kotelchuck: Yes. I just may not, but how did you come to the 15 minutes estimate? Did you talk to somebody walking through the building? Or

did you look at some records of -- you didn't have records, I guess, of then. I mean, it doesn't sound unreasonable. But --

Mr. Tomes: I don't remember the exact, I can't look it up while I'm talking to you but basically, someone looked at how long somebody would actually walk through, spend walking through the facility casually during an inspection.

Member Kotelchuck: And that was told to you by whom? Or how did you -- I mean, you didn't walk through it. So somebody reliable said to you that it should be, I mean, you know, I don't -- it comes from somewhere, I assume.

Mr. Tomes: I can read what's the in the Evaluation Report. That's probably going to give you a better idea of what the basis of that is than what I can tell you. Because I just don't --

Member Kotelchuck: Right. I know it's hard for you to do as you're doing a slide, and there are many, many pieces of data in there. And it's a reasonable number but a reasonable number still has to have some sort of basis. Some sort of objective basis in records, in reports by individuals. And I know you can't look it up now, but I would like to just get a handle on how you got that.

Mr. Tomes: I do have that in front of you.

Member Kotelchuck: Oh. Okay. Good.

Mr. Tomes: I can tell you. It says using a typical walking speed at three miles per hour, or 4.4 feet per second, a person could walk the length of the process building in about 34 seconds. The line for deviation and stops, NIOSH is saying that no single walk through would take more than five minutes. This was a debate on our side when we did this and we thought it was a, probably a reasonable number.

Member Kotelchuck: Yes.

Mr. Tomes: But I would point out that there are some unknowns here. For example, we assumed that this is the amount of time that a person was actually exposed to the highest levels. In many of these areas, there was actually minimally elevated dose rates, and no contamination. So it's a, it is a, just an matter of debate of what the number of hours should be.

Member Kotelchuck: Could I ask, I didn't quite catch the last part of what you said. Is there -- this is a flat area? There are no ladders to walk up to a second floor to look at something? It's just --

Mr. Tomes: The Process Building' a five story building and there would be -- I don't have the pictures of the entire inside of the building, but there were large, large vessels. Some of them 24 feet tall. So there would be catwalks and things like that, I'm assuming. Like it would be in a typical chemical plant.

Member Kotelchuck: Yes. I would think. But that takes time to walk up if there was a need to walk up. That's not --

Member Anderson: This was while it was on Standby.

Member Kotelchuck: Pardon?

Member Anderson: It was on Standby. Yes. I mean, is there anything written as to what the security inspection was supposed to involve? Were there things they were supposed to have padlocks on them that they'd have to check? See things are closed? Was it just a walk through and see if there's been a leak somewhere? Or what?

Mr. Tomes: I have not seen any details of what this security inspection involved. But the security people were not the people who went checking for leaks and maintenance type activities. There was designated, they had a designated protocol for that.



Member Anderson: Yes.

Mr. Tomes: Which, as I mentioned earlier, that that ended in 1975. The maintenance did. But that does not involve security people. That involved the maintenance personnel.

Member Kotelchuck: So they, I mean, with the security, was the focus of their security that there was no intruders in the site?

Mr. Tomes: The way I understood, it was just a typical security inspection to make sure the facility is secure and locked up, as it should be, and no intruders. That's all I've read about and not seen any other, I have not seen any other details of what their responsibilities would be.

Member Kotelchuck: Okay. I'm not entirely comfortable. It sounds perfectly reasonable but I wish there were more definitive basis for that.

Mr. Tomes: Now what I think we proposed, I think what we have is, we have a means to bound the dose. I think what we may have a failure on is what is that number that we're going to use. Because I think we had a pretty good means to bound the exposure rates depending on just a matter of the hours they were exposed.

Member Kotelchuck: Oh, yes. Absolutely. I'm quite comfortable with that. I mean, there's perfectly, you know, there were these measurements made just before the period that the people requested claims for. But to be absolutely sure and 91, you know, truth is, if it were 30 minutes a day, I don't think it would put the people in, you know, in, well, it doesn't, I mean, it's not unreasonable at all but maybe I would, maybe we listen to other folks on the Board, if they are, if that is concerning to them. But I'm not disputing it. I'm just asking for --

Mr. Tomes: I should point out that our technical basis document, the Site Profile, will need to be revised to incorporate the Standby period and this

new information we found. And I don't think that we would have a problem adjusting the hours if we have if that means a more rational approach to do that.

Member Kotelchuck: Yes. Yes. So are we, and I don't know, this is the introduction. Are we being asked to vote on the, accepting this as an SEC, or not today?

Member Beach: Dave, no. It usually --

Member Anderson: For committee. Yes.

Member Kotelchuck: Oh, okay. Fine.

(Simultaneous speaking.)

Member Kotelchuck: Oh, fine. Excellent. Okay. So there'll be a chance to look at that number and all the other numbers. Okay. Good. Then I'm quite comfortable with that.

Member Ziemer: This is Paul. I think we have to probably formally assign this for review to SC&A or to task them. Tom, I have a couple other questions. On the internal dose, those numbers you calculated so far, are you just mainly looking at lung dose for the internal? Of course, it's going to vary. You'd have to calculate it for the dose a particular cancer if you have a claimant. But it looks like typically, the lung would be the main organ of interest here. And with these numbers you're talking about, it's probably a really small, even the bounding dose.

What I'm getting at, it looks to me like the main exposure to an individual annually here is going to be the medical.

Mr. Tomes: I'm going to say you're likely correct.

Member Ziemer: Yes.

Mr. Tomes: The 0.208 dpm/year of uranium, even for the lungs, is not going to be a very large dose.

Member Ziemer: No. Regardless of which organ you chose, it looks like most of these -- but you are regarding them right now as bounding as far as you made these initial calculations and of course, I assume it's going to be reviewed by SC&A or we need to task them to do that.

Mr. Tomes: Yes, we can. What we probably see here is the bounding. That's the reason we selected the highest radiation measurements to be bound.

Member Beach: Paul, this is Josie.

Mr. Calhoun: This is disintegrating and one thing that is interesting to note here on the alpha contamination is both the pick and the removal for pretty much it's pretty releasable levels.

Member Ziemer: Pretty much what?

Mr. Calhoun: An unrestricted release level for uranium.

Member Ziemer: Yes. Right. Right. So that building could, in essence probably have been completely released to the public.

Mr. Tomes: Yes. That was the recommendation from the survey, but there were other considerations they had for the nickel and possible if they found more contamination in the residue system, which they made sure they had radiation technicians on staff when they did the demolition for that. There may have been some chemical toxicity issues anyway.

Mr. Calhoun: Yes. So arguing 15 minutes for a site that's essentially prereleasable and, I don't know, I don't know how much time to put into that.

Member Ziemer: Well this is one of those cases where the doses are so small you can tolerate a high level of uncertainty. You can double the number and it's not going to change much.

Mr. Calhoun: Right. Yes. I agree, Dave.

Member Kotelchuck: Okay.

Dr. Roberts: Okay. If I could break in here. I'm not sure if there are any petitioners that may be on the line, but I do want to make sure that they had an opportunity to comment or present. Okay. I'm not hearing any. Now I understand with this site, we need to set up a Working Group. Have I got that right?

Member Beach: Rashaun, I have a question to you and Paul. Would this one fall under TBD-6000?

Member Ziemer: Well, I wondered about that myself. It's in many ways quite different. I mean, we're talking about, they're not really, they're really not rolling or doing uranium, per se. But it looks like a chemical process just to produce nickel. It doesn't look like any of the TBD-6000 processes are similar. Andy, what about your group? Same issues?

Member Anderson: Yes. I would say the same thing. I mean it's, they were rolling -- yes, I'm not sure if it would fit with what, you know, the typical facilities that we've reviewed do.

(Simultaneous speaking.)

Member Ziemer: I'm certain about the opinion that we should task it to SC&A and have them write their report, and see whether it's worth having a full Work Group effort if there really aren't significant findings that need handling.

Member Kotelchuck: I think that sounds like, that sounds like a good idea.

Member Beach: Yes. I would agree with that also.

(Simultaneous speaking.)

Member Ziemer: If we can avoid another Work Group, we probably should. We're shorthanded anyway right now on the Committee. I don't see this being a big effort.

(Simultaneous speaking.)

Member Ziemer: Can we put on something really substantial.

Member Anderson: Dave, you seem, it looks like you seem kind of interested in this and you're of --

Member Kotelchuck: I'm on AWE, am I not.

Member Anderson: Yes. I mean, if you're interested, I mean.

Member Kotelchuck: Yes.

Member Anderson: It isn't exactly, but I'm not sure I would, if you said, gee, why don't you guys take it on, I think we could do that. Rather than have to go and create a whole new group.

Member Kotelchuck: Right. I think we could. That's my feeling too.

Member Anderson: Let's --

Member Kotelchuck: Have one more member of our group.

Member Anderson: Yes.

Member Kotelchuck: But for the moment, really, we don't have to decide that.

Member Anderson: No.

Member Kotelchuck: For the moment, SC&A will review and after their review, we'll decide what to do with it. But you're right. I'm disposed as an AWE member to saying, good chance it would come to us if need be.

Member Anderson: All right. As a home of last resort.

Member Kotelchuck: Right. Okay.

Member Anderson: We would do it justice.

Member Kotelchuck: We will. We do, we will do justice to all.

Member Ziemer: This is Paul again. I'm trying to recall if we need to formally make a motion to task this or just leave it up to the DFO to task it.

Member Beach: I think just the DFO. Isn't that all it requires?

Dr. Roberts: Yes.

Member Kotelchuck: I think it's all that's required.

Dr. Roberts: Yes. I think that's it.

Member Kotelchuck: I think that's automatic. It's standard procedure.

Dr. Roberts: Yes. Okay, very good. So it sounds like once we hear back, get the SC&A report, then we can decide about whether or not a group needs to be formed. It sounds like that's not likely but we'll assess that after the SC&A's report.

Member Kotelchuck: Exactly.

Dr. Roberts: Okay. Fantastic. Well, were there any further comments on this presentation? Or are we ready to kind of wrap it up?

Member Beach: I have one more question. During Terrie Barrie's comments yesterday afternoon, she mentioned forming a Work Group on looking at the petitions. And I'm not suggesting we form a Work Group for that, but I thought we might. Was there anybody that thought that might be something that the Board should look into?

Member Lockey: Jim Lockey. We used to have a Work Group in the past did that. And we last did that about, what, ten years ago.

Member Beach: Yes. I thought that was --

Member Lockey: So we can reinstitute that work

group, but there'll be, I don't remember who was on it besides myself.

(Simultaneous speaking.)

Mr. Rutherford: I could tell you who was on it. It was Jim, Dr. Lockey, it was Dr. Roessler, Dr. Munn, or Wanda Munn, and Dr. Melius.

Member Lockey: We could just, if you think there's a need to do it, we can just reinstitute that group and replace Dr. Melius and Dr. Munn with two other members.

Member Kotelchuck: I am open to that. I did not comment when Ms. Barrie spoke. But I was also favorable impressed with anything that would help claimants put in an appropriate claim if they were claiming an SEC. So it's always, if we can help, it would be nice. I don't know if we can. I don't know if every issue she raised would have been appropriate. But I would certainly be happy to be on such a committee to think about that and see what we could do.

Ms. Naylor: Hi. This is Jenny Naylor with (Audio interference). As I recall, the Work Group that was instituted to look at the difficult occasions of SEC petitions was actually specifically looking at whether the NIOSH procedures and policy were consistent with the rules and regulations. And that's very much in line with responsibility delegated by the President to the Advisory Board, due to Executive Order, 13.179. And so if we wanted to have a conversation about whether to reinstitute that, and also to look at the process or looking at specific disqualified SEC petitions, then I think maybe a more nuanced conversations about whether that is consistent with the Advisory Board's charters and it's delegated responsibility, you know, that's in line with that request.

Member Kotelchuck: Oh, good.

Member Beach: So Jenny, who would have that

conversation? This is Josie.

Ms. Naylor: Well, so in the past, it would have been the Chair of the Advisory Board. And also with the DFO. And I think leadership at NIOSH would also be involved. Because you know, the Advisory Board, it is the Federal Advisory Committee, and so all those tasks and responsibilities falling under this specific Federal Advisory Committee is charter and is also reflected in the executive order with statutory responsibilities.

So I think we could have more offline discussions and then looking at some of the, you know, the statutory provisions, as well as the regulation in 13, I think it's 42 USC, I'm sorry. 42 CFR. It might have been 13.15. That's where he outlines how the Board, when I should review the SEC petitions. So I'm moving that definitely do more conversations -- have more conversation about that and, you know, if it's a request from the Board, then we can submit it to the DFO and the Office of General Counsel will definitely look at that issue with you guys.

Member Lockey: How did it happen ten years ago? What was the -- how is that different than what we're asking for today?

Member Ziemer: This is Paul. I think Jenny is saying before we reopen that Work Group that we have General Counsel and DFO, and probably NIOSH examine what the legal implications are and biases. Is that what, did I understand that correctly?

Ms. Naylor: Yes. I think that is. Because I wanted to go back to look at the transcript to see exactly what is asked for. And also, what's really the scope of the Board's responsibility here in this task. As I recall, I think the Work Group, the charge of the Work Group to review the SEC petitions that do not qualify for evaluation. It's actually to look at whether the SEC final rule is reflected in the legislation. So in this provision, how the SEC petition should be evaluated.



And so that review was at a higher level review in terms of making sure that the procedures and policies are consistent with the regulatory, with the regulatory provision. And so if the Advisory Board is not satisfied with the prior Work Group's evaluation, then that's something that we can talk about. But if today, the request from the Advisory Board is that they want to specifically review all petitions that did not qualify for further evaluation, then I think that's a different line of conversation where we have to really look at what's the statutory responsibility delegated by the President to the Secretary, and also with the delegation from the President, to the Advisory Board through the Executive Order.

And also what's the Advisory Board's charter. So that's really the thinking that needs to go in, more than just establishing the Work Group.

Member Kotelchuck: Right. Also, Jenny, I'm a little, I didn't think it was a question of turning down SEC's, or reconsidering the process by which we accept or turn down. I'm thinking more that the request was by a claimant or a claimant's counselor to look at the process of giving information to claimants, how we help claimants, advise them in terms of improving, or giving us a claim that fits into what we're doing.

So I'm not thinking we're overturning something. I really understood the request to be assisting claimants by giving them information, or more information about our process.

Member Lockey: David, this is Jim Lockey. I agree with you. I agree with you. That's what I heard in that request. We're not trying to double think what NIOSH has determined, just whether the procedures are followed and getting back to the claimant to explain to them what was missing, or why it wasn't qualified.

Member Ziemer: This is Paul. I wonder if I could, I know that we don't have public comment right now, but I hope the attorney is on the line. I wonder

about if it would be appropriate to ask Terrie to provide all the Board Members the exact wording of that. I think it would be helpful to us to have the wording of that request.

(Simultaneous speaking.)

Ms. Barrie: This is Terrie.

Member Ziemer: -- general counsel also take a look at it and see if there's any issues we have to worry about.

Ms. Barrie: Hi Dr. Ziemer. This is Terrie and I'd be happy to, well actually, I submitted my written comments on the NIOSH docket but I'd be happy to send it to Dr. Roberts, again, to circulate it to the Board and to Jenny, if that's what you're asking.

Member Ziemer: That's what I would like to see as a starting point. I sort of have a general idea of what it was but before we set up a Work Group, or reopen one, maybe we can take a look at that. I'm happy, if once we look at it, we can ask that the Work Group be initiated. We need to do that right away once we have the reading -- or the material, I think.

Member Kotelchuck: And I think we could --

Ms. Barrie: Dr. Robert --

Member Kotelchuck: Sorry. I'm sorry, go ahead.

Ms. Barrie: Dr. Robert, do I need to resubmit this or can you just send that to the Board Members?

Dr. Roberts: No, I can send it. I have them.

Ms. Barrie: Okay. Thank you.

Member Kotelchuck: Okay. So in fact, let's consider this. It'll come up and we can discuss it further at a future meeting. I mean, I did have some favorable views about what was said but let's find out exactly what's requested, and then discuss it ourselves,

whether we want to initiate some changes, some modifications, which would, of course, have to be checked through by legal counsel.

Dr. Roberts: Of course.

Member Lockey: LaVon, are you still on the phone?

Ms. Barrie: If any of you have questions, I'd be happy to answer them.

Member Beach: Thank you, Terrie.

(Simultaneous speaking.)

Mr. Rutherford: Yes, yes.

Member Lockey: So when we did this originally, one of our concerns was that when we got back to the petitioners was made clear as to why my request was turned down. I think we went through that and I was reassured at that time that it was put in language that the people could understand, as to why a petition didn't meet the qualifications. Is that still going?

Mr. Rutherford: Yes. Well, I can tell you that there has been actually changes made much beyond that, even to the point where we've tried to pull in plain language, we've tried to do a lot of different things. We took the findings from the Work Group. We implemented the changes. One of the biggest findings from that Work Group was that communications back to the petitioner.

I did hear Terrie's discussion last night and her discussion yesterday was that apparently that it was not readable or understandable, and so on, so maybe we need to look back at that. I'm not sure.

Member Lockey: Can you share that with us too, LaVon? Can you share along with Terrie, her concerns? Or LaVon, do you have that? Do you have that on this petition?

Ms. Naylor: Dr. Lockey?

Member Lockey: Yes.

Ms. Naylor: This is Jenny. I will direct your request to Dr. Roberts because she does have access to the documents submitted to the docket. And I also just want to note that Ms. Berrie's replies to have a panel of three HHS personnel who are not involved in the SEC petitioner evaluation are not really, are not employed by the dose reconstruction programs currently reviewing the decision not to qualify the petition.

So the due process that's outlined in 42 CFR 83.11 is actually in place right now. So I would --

Member Lockey: I got you.

Ms. Naylor: -- respectfully ask the Board to also give that, give the time and space for the panel to conduct its administrator review and be able to respond appropriately to Ms. Berrie's request.

Member Lockey: That sounds good. That's additional information. Great.

Member Kotelchuck: Good.

Dr. Roberts: Okay.

Member Lockey: So maybe we can look at this at the next conference call.

Member Kotelchuck: Yes.

Member Anderson: Or the next Board meeting.

(Simultaneous speaking.)

Member Lockey: Yes.

Member Anderson: There's a lot --

(Simultaneous speaking.)

Member Anderson: Maybe a presentation summarizing what's actually in place now after the committee. We don't often see that (Audio

interference) forgotten about that issue about outside HHS staff review as well.

Member Lockey: I agree with Andy. That would be helpful. That would bring us up to date on the whole process and how it has evolved over the last several years.

Member Beach: Is that something, this is Josie, NIOSH would do? LaVon is your hand up? I can't see.

Mr. Rutherford: I was waiting for my boss to jump in but he didn't. Yes. That would be something that I would do if my director decides that's what I need to do.

Member Anderson: Let's first look at the document and then we can see if we want to go to that extent.

(Simultaneous speaking.)

Mr. Rutherford: I really don't have a problem doing a presentation on how the qualification process works.

(Simultaneous speaking.)

Member Anderson: I mean, I don't want to make a lot of extra work if we don't need it, but I think that would sort of set everybody at the same point of what would we like that a reconvene committee would ever do. What would be (Audio interference).

(Simultaneous speaking.)

Member Anderson: We don't want to try to come up with something that's actually already in place.

Mr. Calhoun: This is Grady. And my understanding would be that if we decide that this is, this needs to be looked at again, we wouldn't be looking or, you know, asking the Board to be looking at qualification reviews for each petition. I think you're looking at the overall process to see if the process is okay.

Member Lockey: That's correct.

Mr. Calhoun: And because of what Jenny just mentioned, was that, you know, we do have that independent review committee that's available every single time the petition is reviewed, you know, during the qualification process. So, yes, just to look at the overall process and not a look at each one as it comes through because that would really belabor the entire process and it just wouldn't work.

Mr. Rutherford: Right.

Member Lockey: LaVon, what would be helpful for me is if you did give a presentation how, you know, how it's evolved over the years. So that brings us up to date to where you stand now so we have a good idea about that.

Mr. Rutherford: Right. I can go through all the way back from 2007, I believe, is when that Work Group actually last made this, their determination, and I could -- the findings from that, what we changed, and then what's changed even beyond that up to this point.

Member Lockey: That would be wonderful. I think that would bring everybody up to date and then we can make a decision after that.

Mr. Rutherford: Right.

Member Anderson: Is the external review group always the same people?

Mr. Calhoun: No.

Mr. Rutherford: Jenny could actually get into this more than I can. But it's three people picked by Dr. Howard, independent people that are not involved in the program. Jenny can add to that.

(Simultaneous speaking.)

Member Anderson: I know it's done but I don't remember how it's done or what, you know.

Member Ziemer: This is Paul. I suggest that we have this discussion at the next phone meeting after we learn from Jenny what -- any legal limitations and what we can do. And we can answer all these questions then. This isn't on today's agenda and we have a starting point. So let's answer all these other questions when we have more time and have it on the agenda.

Member Kotelchuck: Agreed.

Member Ziemer: I guess I'm moving for adjournment.

### Adjourn

Dr. Roberts: And I will go ahead and circulate Terrie's comments that she posted in the docket for your review. So are we at a point where we can kind of wrap this up? Is there anything else before - - okay. Okay. So we're at the end of the meeting. I want to thank all the people who presented and prepared documents and presentations for today. It's been a very productive meeting from my standpoint. And really appreciate the participation of folks from the outside, from the public, and their comments.

And in general, thank you all for your attention and your engagement. And also your understanding since this is my first meeting, and I'm sure there were a few rookie mistakes in there. So thank you so much. You've been very gracious.

So with that, with no further ado, we'll go ahead and adjourn.

(Whereupon, the above-entitled meeting went off the record at 6:48 p.m.)