The Work Group convened via teleconference at 2:00 p.m. Eastern Standard Time, Henry Anderson, Chairman, presiding.

PRESENT:

HENRY ANDERSON, Chairman
WILLIAM FIELD, Member
ALSO PRESENT:

TED KATZ, Designated Federal Official
DAVE ALLEN, DCAS
HANS BEHLING, SC&A
SAM GLOVER, DCAS
JENNY LIN, HHS
JOHN MAURO, SC&A
AMY MURAWSKI
JIM NETON, DCAS
ARIS PAPADOPOULOS, SC&A
LAVON RUTHERFORD, DCAS
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MR. KATZ: Let me say for everyone involved there's an agenda for this meeting, and I hope some of you have received emails about it, but it's on the NIOSH website under the Board section -- under the meeting section, not the Board section, so you're welcome to that agenda. There are some documents associated with this meeting, as well. They should be there.

And let me just ask everyone except for the people who are addressing the Work Group to mute your phones. If you don't have a mute button you can just press *6, and that will mute your phone, *6 again will take your phone off mute. So, please mute your phones. And that's it. It's your agenda. Andy.

CHAIRMAN ANDERSON: Okay. The first discussion is concerning Electro Metallurgical, and a revised ER to add a Class
to the -- or to create an SEC Class. So, who's going to give us the update on that? I think we got the written part of it.

DR. GLOVER: I'd be happy just to --
I think we've summarized it in our May 16th, and also in an email on November 16th.

CHAIRMAN ANDERSON: Yes.

DR. GLOVER: But NIOSH carefully reviewed the data and listened to SC&A, but also internally we looked at all the data that's been collected, as well as additional information regarding changes in the program.

And as is summarized in our November 14th email, that the air monitoring and bioassay data collected in the early time frame do not provide a bounding upper intake estimate for internal dose of Electro Met. Bioassay data do exist prior to 1948, the data do not provide a bounding intake for all employees in the earlier years because no worker job titles are available. The highest exposed workers were
monitored. And also the bioassay data prior to 1948 are from a single campaign and may not represent overall facility operations.

Examination of air monitoring data clearly shows that almost all data was collected after 1948. Documentation has also come to our attention that upgrades were made to a safety program, extensive according to the documentation in 1947, end of '47. Because these upgrades likely reduced the exposure after 1947, NIOSH no longer believes the air monitoring data collected in 1948 and '49 can be used to back-extrapolate exposures from earlier years. So, I think we've summarized -- we've tried to maintain and not go into changes after 1948. We really focused on making that discussion consistent with what I've provided in this.

We realize that there are still some elements before the Board. We believe that those are -- SC&A, that we could work
through those, but we thought that this was an opportunity that we should take to --

CHAIRMAN ANDERSON: To approve that as a --

DR. GLOVER: An SEC Class, yes, sir.

CHAIRMAN ANDERSON: Okay. SC&A, do you have any additional comments?

DR. MAURO: Yes, this is John Mauro. We had a chance to review the Evaluation Report over the past week or so. Bill Thurber actually did the review, and he called me this morning to let me know that he has a medical situation that he had to deal with, so he briefed me. And he also sent in a preliminary report.

And what I could do is sort of summarize it, as I understand it, best I can, which is sort of interesting because what Bill had to say was that after reviewing the evaluation report -- and he's very familiar
with the history of this because he's been close to Electro Met for some time. He found a couple of things that were interesting that need to be, in his opinion, that is how he explained to me, a little better developed. I'll explain.

As Sam just mentioned, one of the concerns we had from the very beginning was that there was certainly quite a bit of data in '48, '47 I believe time period, air sampling data, but -- and it would be -- and the original position that NIOSH had was that it could be back-extrapolated to the early '40s where there was little or no data available. And, clearly, Sam concurs that there were sufficient changes that occurred between the early '40s and the late '40s that make it difficult to extrapolate back.

However, Bill's review recently revealed that there was some bioassay data in the early years, and there was bioassay data
in the later years. And his review of that data seems to indicate that the data covers a large number of the workers that were -- we understand were actually there. And that when you compare the bioassay data for the early years and the later years, they're comparable; that is, the distributions of the concentrations seem comparable.

So, we're in the situation, we're saying that it appears that there is information in the Evaluation Report which would -- and the work that was -- and the reports that were reviewed by Bill that would indicate that perhaps you can reconstruct the doses in the early years. Not that we're saying you can, we're saying that there is enough information there that sort of like cries out for some discussion of why that might be a problem.

Now I just heard Sam, I think you made a point here that might really put this
to bed, in that you felt that it was difficult to tell whether you captured the high-end people.

All I can say is that when Bill looked at it, he felt that there was a lot of information about who was monitored, the people, their job descriptions by way of bioassay early years/late years, that it seemed that in his, like his initial impressions from the review he was able to accomplish to date, which he did not complete, by the way, but he got pretty far down.

As you may know, he didn't actually look at the ER until it became available a week or so ago. In any event, so we're in a strange position to say that there seems to be some indication that perhaps you could reconstruct the doses. So, that was the first message he would like to sort of put on the record, that it appears that a little bit more needs to be said regarding why the
existing data really -- that you do have, namely, the bioassay data in the early years, somehow is inadequate with respect to capturing the high-end folks.

In his opinion, it seemed that it might very well have done that. And that when you look at it, it is -- it compares very favorably with the later years where you have both bioassay data and air sampling data. So, it almost puts you in a position to say that perhaps we can reconstruct doses. So, we're in this unusual position of saying that maybe a little bit more discussion on that matter is needed.

The second point that Bill brought up is, he took a careful look at I guess the original petitions, and there were two, related to -- let's assume for a second that an SEC is warranted here. That's where this all comes out. He felt that when looking at the petitions, and looking at interview notes,
and the site, and the data itself; namely, the film badge data, and the bioassay data, that it seems that you could actually identify all the workers that worked there in the -- I guess there was an area. I forget the exact name of this relatively small area where the AW work was done.

So, again -- and he -- I have this all written up in front of me in draft form, and it's incomplete. But he points out a number of reasons why it seems that you could if you were to assign an SEC, that you could limit it to this area where the actual work, AW work was going on because of what he felt was relatively complete documentation of who was there, and that there were by way of the film badge data, and by way of the bioassay data, and also with regard to indications of -- that there was access controls, so the folks going in and out, there seems to be pretty good information along
And he also pointed out that the two I guess petitions that came in he felt were a bit unusual. We're in a strange position here, but a bit unusual in that in one case he felt that I guess the first petitioner actually did not work in the area of interest, but worked in another area as a furnace operator, which would really not place him -- he wanted to just point that out to me. And that the other petitioner, as best he can tell, did not work at all at Electro Met. He was in a physically different facility, and there may be some confusion regarding what -- where that person actually worked.

Now, again, I qualify all of this as being Bill's review, and as he communicated to me, and as written up in the draft material that he sent to me about two hours ago that I just read. So, I think it's important that we get this information, because this is the best...
we can do with what we have. Get this information on the record to make sure that some of these issues, perhaps they are adequately covered, and if they're not, perhaps they need to be a little more thoroughly covered to make sure that the documentation in the record is complete for the purpose of making a -- for the Board to make a judgment regarding this SEC petition.

CHAIRMAN ANDERSON: So, which periods are you talking about?

DR. MAURO: This -- I think it's the early -- I believe the SEC petition that's before us goes up to what, '47 or '48, from '42 to '48. Is that correct, Sam?

DR. GLOVER: It goes from '42 through December 31st, 1947.

DR. MAURO: '47, okay, there you go. So, I was close. So, it's --

CHAIRMAN ANDERSON: So, '48 to '58 petition?
DR. MAURO: The '48 through 1953, they asked for it through '58, but the facility ceases to be a DOE facility after 1953.

CHAIRMAN ANDERSON: Right.

DR. GLOVER: Which is why we addressed from '48 to '53, is that we could do it.

CHAIRMAN ANDERSON: Yes.

DR. MAURO: Yes, and the comments I just mentioned really went toward this -- the period that's covered by the Petition Evaluation Report, where it's recommended that from -- up to '47 be included as an SEC. Well, we just have certain questions we raised that seems to be the position as best we can tell at this time. It's a little soft in the areas that I just mentioned.

DR. GLOVER: If I could just briefly, on -- in November of last year, we C- - I believe that was the correct time, and we
provided -- on May 16\textsuperscript{th}, 2011 provided a NIOSH update in which we detailed the bioassay data that's available.

I went through every individual name in the bioassay record to compare it with the external dosimetry data set. There are numerous names in there that are not -- that are in the bioassay record and they're not in the external dosimetry. We have no -- I tried everything I could to obtain worker titles for those. So, in that I actually detailed what worker Classes we had occupations for, and almost made graphs of what the -- how they compare.

It is our strong conclusion that we could not use this data. We had looked carefully at it, and we provided the Board with -- we did not try to bring that full detail to the Evaluation Report, but it has been provided in a previous communication regarding our concerns over this data.
DR. MAURO: Let me write that down because I do want to communicate it to Bill so he could just confirm that maybe he didn't look at that in this round. I know he looked at the Evaluation Report. What was the date of that report that you're referring to?

DR. GLOVER: On May 16th of 2011 the Advisory Board was provided an update, as well as SC&A, of what our status points were.

DR. MAURO: Yes.

DR. GLOVER: There was an appendix that summarized the data that was available for Electro Met. So, like Figure 5 describes the operational periods in bioassay so you can kind of get a feel for the --

DR. MAURO: Okay.

DR. GLOVER: -- levels of data. It also then breaks down the occupational exposures, which I went through and tried as best as we could, as you can see, almost 60 to 70 percent of them had unknown occupations.
DR. MAURO: Okay.

DR. GLOVER: So, looking at that data carefully and the types of changes that occurred, and that it was a single campaign does lend one to want to stand up and defend the --

CHAIRMAN ANDERSON: Attribute it to everyone.

DR. GLOVER: Yes. So, I -- certainly it's the Board's determination on what they choose to move forward with or not, but we have had significant discussions with the Department of Labor about putting people in places. The company absolutely will not put people -- yes, there is some security, but we certainly do not have what we consider a roster. We do not believe we have the ability to differentiate these people. Perhaps if it comes in as an unknown, we can't, and the company refuses to, and the Department of Labor can't put them in places either.
DR. MAURO: Sam, you know what I'll do is, I'll just communicate that to Bill when he's freed up. Unfortunately, like I said, he's not available to us right now. He's got these problems he's dealing with, but I'll just check in with him, make sure he does take a look at your May 16th report and factor that into his consideration.

I don't know how best -- with respect -- I mean, the best I'm doing right now is to give you sort of a status of initial impressions. Is there anything that in order to -- in light of this conversation, Ted, would you like us to put anything on the record by way of a written paper? I think Bill is pretty far along, but I can't speak to whether or not -- how carefully he reviewed the May 16th report and taking all this into consideration.

MR. KATZ: John, this is Ted. I certainly think that you folks, Bill, you,
SC&A needs to complete the report. And by all means, you know, whatever you learn from this meeting today factor into how you complete that report.

DR. MAURO: Very good.

MR. KATZ: Go into other documentation or what have you.

DR. MAURO: Yes, I don't think we're far away from being able to put something in writing, but certainly I would want to ask Bill to take a look at the May report, which I didn't do in preparation for this meeting and address it. It may turn out that there are -- he did not look closely at it and come to the same place you did, Sam, or -- but he may actually have looked at it and felt differently. So, it's best for us to get this out and we'll get that our fairly quickly. My guess is we're not more than a week away.

MR. RUTHERFORD: Okay, John. I just
wanted to -- this is Bomber. I want to remind everyone this is on the Board's agenda for the meeting in February, so as quick as we can get it and we can --

DR. NETON: Well, I'm concerned. This is Jim. I mean, we're two weeks away from the meeting. If we get a report in a week or so, that gives us enough time to incorporate any revisions into this --

DR. MAURO: We'll move this as fast as possible. As soon as I -- I hate to speak for Bill, but from the way I spoke to him earlier, the only thing I'm concerned about is that perhaps he did not look that closely at the May 16th work. I think he looked at the Evaluation Report, and perhaps all this wasn't -- well, all I can say is that I tried my best to pass on to you some of the impressions he left with me this morning. And we will try to get something out really fast. We realize that we're in a situation here, that is sort of a
bit unusual.

CHAIRMAN ANDERSON: Yes, I mean, we had hoped to move this --

DR. MAURO: I understand.

CHAIRMAN ANDERSON: -- with the Committee here, and certainly what I've seen from what NIOSH sent us, it seemed to be a rational approach.

DR. MAURO: Yes.

CHAIRMAN ANDERSON: And my concern is, I'm not sure we would -- NIOSH doesn't believe they can do it.

DR. MAURO: I know.

CHAIRMAN ANDERSON: You're going to provide documentation that they haven't already considered to do it. I mean, you can finish up your report but, I mean, my sense at this point is what kind of overwhelming -- something that NIOSH has overlooked is going to come out of yours. I mean, I suppose we could take this to the Board and say the Work
Group heard this and haven't been able to digest what you did, and circulate it to them and see -- or I guess we could ask Bill how he feels.

At this point with what we have in writing endorse what NIOSH has done, and then if what you have would convince the whole Board differently, that can be a discussion at that meeting.

DR. MAURO: I would -- I think a better -- I'd like to say that the way it was communicated to me, and the way I just heard it from Sam, it certainly sounds like Sam did look very carefully at the ability to -- at the data and whether it met sufficient accuracy in his May report, what we just heard. But at the same time, of course, Bill has been following this fairly closely, so I'd like to try to get something together and get it out to you guys fairly quickly.

We're in a very -- this is an
unusual circumstance for us, but this is where we came out at this point in time. And, certainly, I don't want to be in a position to slow things down, but Bill has been following this, and I think it's important that we communicate out material. And then, of course, the Board could weigh the information as you see fit.

We'll get something out quickly. Hopefully, I'll be able to reach Bill later today. He's at the hospital today, and just let him know that we do need to put something together. Certainly, we will need to make sure we check the May 16th report. And Sam and the folks on the Work Group, would there be any problem with Bill talking directly to Sam in the interim so that we could make sure we take every -- make sure we have everything in front of us that we need to be able to put together something that might be useful to the Work Group?
DR. GLOVER: Just real briefly, I mean, in November we -- I sent an email out to the Chair, and I guess I hadn't seen where they tasked the response. I want to make sure that I provide a response responsive to the Working Group in this. So, we have provided an official public document out there. It is not trivial to make changes, obviously, to that, so I want to make sure what mechanism we're kind of working from, and what the Working Group would like us to do. One, has SC&A been asked how they're going to send this, and what they want in the way of a response, if anything?

DR. MAURO: Well, from my perspective, my main interest is to make sure that when we provide our commentary on the Evaluation Report, that we make sure we take everything into consideration that has been put on the record and has been delivered. And if there's any ambiguity or question that Bill
might have after making sure he checks reads all that material, which I believe he probably already has, but if he has an opportunity just to call you just to clarification, not for new information. We understand that it's not our place to call you to get new information, but to make sure we understand the information that we're looking at. And then from there we could put something out maybe within a matter of days. You know, I hate to --

CHAIRMAN ANDERSON: I mean, the reality is with notices and all there is no time between the next -- to schedule a meeting of our committee to look at something in writing new, so I guess I want to ask Ted -- I mean, as I said, one thing we can do is we can put it on the overall -- if it is, it's already on the meeting schedule and have a discussion if we get the information early enough.
I mean, I don't recall in our November meeting that when we heard that there was going to be change and then it came out, that we charged you to review that.

MR. KATZ: No. Andy, this is Ted. I'm sorry. I think it was asked

MR. COLLINS:

CHAIRMAN ANDERSON: Okay, but --

MR. KATZ: -- what became available. And really, I mean, just some context here. They received the report very recently, so they haven't had a lot of time with it. I think it's perfectly understandable what's happened here. They had very little time so they did not have time to produce a written report. But they were asked to review it. The Work Group asked them to review it when it became available.

And I think you want to do due diligence here. I think we want to hear from SC&A what they learned from their review. It
is on the agenda for the February meeting. I don't consider that a problem. From what I hear from John, it's likely we'll have the report -- certainly we'll have it before the Board meeting. And it sounds like we might have it within a week.

The Work Group, of course, won't have deliberated over the latest SC&A report, but they can come to some judgment without that report with reservations with respect to that report which they want to see, I'm sure. And then it can get discussed at the Board level so it doesn't necessarily have to hold anything up.

It could be discussed at the Board level and resolved there. If the Board wants you to bring this report back and go into it more deeply, the Board can decide to do that. But if the Board after reading the SC&A report and the SEC Evaluation from DCAS, and the Board decides we know enough and we can go
forward, that's fine, too.

So, I don't think there's a great problem really. It's just --

CHAIRMAN ANDERSON: Well, I just wanted to be sure we were not going to run afoul or have to delay the discussion at the Board meeting.

MR. KATZ: I don't think so. And as far as John's question about contacting -- it makes a lot of sense --

CHAIRMAN ANDERSON: I would agree.

MR. KATZ: -- for Bill to get in touch with DCAS if he has questions so that his report be complete and take into consideration as much as possible, because that will be most helpful to the full Board in February.

MEMBER FIELD: Andy, this is Bill Field. Listening to this, I think I agree with what you first said. I haven't heard anything today that would prevent the Class being added
from '42 to '47. And there may not be in the report after they get together and discuss this, so I think I'm on board with you that we -- I'm in favor of taking NIOSH's reservation unless something comes up in the review that SC&A is going to perform that would indicate we should look deeper into it so it may just be as easy as you and I getting together and just discussing the report before the Board meeting, so we can maybe even talk to Mark and come with some sort of Board recommendation, or Work Group recommendation for the Board.

I hate unless we have to take stuff to the Board and start fresh again without a recommendation from the Working Group.

CHAIRMAN ANDERSON: Right. Okay, I think we've got our way forward. The other is -- I'm just trying to look through my notes here. Have all the issues related to denying the '48 to '53 period been resolved with SC&A?
DR. MAURO: Yes. When we originally reviewed it, we were in concurrence that post '47 seemed to be in pretty good shape.

CHAIRMAN ANDERSON: Yes.

DR. MAURO: So, we're in the unusual position, perhaps maybe the first time where we just felt, as I tried to explain, that there may be reasons why you could do before it, and for the reasons I just described. But clearly, Sam has explained that perhaps we just need to look a little more closely, and we'll come to the same place that NIOSH did.

CHAIRMAN ANDERSON: Okay. I just wanted to be sure, if we're going to move forward to the Board with kind of a tentative recommendation that we've resolved all -- I mean, this has been on the agenda for a while.

DR. MAURO: This is a bit of a reversal of our position.

CHAIRMAN ANDERSON: Well, no, I
just wanted to be sure -- my notes here were
that we thought everything was fine that NIOSH
responds to the petition regarding '48 to '53
was appropriate. And I thought we were
supportive of --

    DR. MAURO: Yes. And we are, also.

    CHAIRMAN ANDERSON: Yes.

    DR. MAURO: It's just this unusual
place where we might not -- we're finding a
little difficulty in granting the SEC before
'47.

    CHAIRMAN ANDERSON: Right.

    DR. MAURO: Which is, like I said,
an unusual position for us to be in.

    CHAIRMAN ANDERSON: So, Bill Field,
do we have anything else on this before we
listen to the -- ask if there's public
comments?

    MEMBER FIELD: No, I'm good with
this one.

    CHAIRMAN ANDERSON: Okay. So, Ted,
let's open it up if there's any public who want to comment about this?

(No response.)

CHAIRMAN ANDERSON: If there is, if you're trying to talk remember to take it off mute.

MR. KATZ: Right. This is Ted. We may not have any members of the public from Electro Met on the phone. I don't recall that anyone spoke up earlier.

CHAIRMAN ANDERSON: Okay.

MR. KATZ: I think you can -- we haven't heard anything. I think you can carry on to United Nuclear.

CHAIRMAN ANDERSON: Okay. So, Bill, you want to make the motion that you already sort of did?

MEMBER FIELD: You mean for the Work Group to approve it?

CHAIRMAN ANDERSON: Yes, provisionally.
MEMBER FIELD: Okay, I'll do that. I'll make a -- to recommend NIOSH's recommendation that a Class be added from '42 to '47 and retain the existing recommendation to deny the Class from '48 to '53, or '58, however it should be --

CHAIRMAN ANDERSON: Yes, well they asked, but it's -- yes. Okay, thank you. But we're provisionally doing that, pending further discussion.

Okay, with that since there's just -- I don't -- Mark hasn't come on yet, has he? So, I -- since you made it, I'll second it. And I agree with you, so I would say the motion passes.

So, let's -- with that, let's move on to United Nuclear, and we'll -- John, we'll look forward to working rapidly with --

DR. MAURO: Yes. No, we will move very quickly on this. We understand the situation we put you in, but at the same time
we felt we were given a mandate to --

CHAIRMAN ANDERSON: No, we --

that's why we wanted you to --

DR. MAURO: Yes.

CHAIRMAN ANDERSON: -- look at it, so don't -- you don't need to be apologetic for anything. I think we can move ahead on this. We'll see how it works out, and we could still take a recommendation to the Board. And if you convince us otherwise, we can also take that to the Board, as well.

So, let's move on to United Nuclear.

MR. RUTHERFORD: Okay, this Bomber, LaVon Rutherford. I can't help it, habit.

We left the last Work Group meeting, there was a couple of action items that we had been given after the Work Group meeting. And one of the first ones focused around how dose reconstructions would apply to 50th percentile versus the 95th percentile of
the distribution for 1961-62.

Those -- everyone should recall that during that period we have a gap of no bioassay data. We had developed a distribution that took data before the 1961 period, after the 1962 period, and we basically worked through that gap period and came up with a distribution. And we had identified a 50\textsuperscript{th} percentile.

The SC&A had felt that we should be using the 95\textsuperscript{th} percentile, and they brought up some good points. The one good point is that there is no bioassay data obviously during that '61 to '62 period, and the question came up then if you're applying the 50\textsuperscript{th} percentile, is there a group of workers that -- who maybe potentially worked during that period didn't work on either side of the '61 to '62 period that would be given the 50\textsuperscript{th} percentile, and they really should probably be given the 95\textsuperscript{th} percentile.
We committed to going back and looking at that. We are still looking at that. We are going through each claim, one, to see if we have any claims currently that actually land in that where they only have time within that gap period, or they don't have any monitoring on either side. And we anticipate completing that analysis probably -- it's actually -- some of the information is internal review now. We should have a good answer by shortly after the Board meeting, and we could support a Work Group to discuss I believe all the remaining issues shortly after the Board meeting in February.

CHAIRMAN ANDERSON: Just to refresh my memory, is this also an SEC petition?

MR. RUTHERFORD: Yes, this is an SEC petition, but I think that -- and there is -- yes, we do need a Board recommendation one way or the other, whether they agree with us or not.
I think we did leave the last Work Group meeting with the position that at least between NIOSH and SC&A, both groups felt that this was not an SEC issue, that this was just a determination of where -- what part of the distribution we should be using for this matter.

DR. MAURO: And I agree. That's --

I read the transcript today, had a chance to talk to Hans who was close to this, and yes. So, we are in full agreement that this is not an SEC issue. It's a matter of what protocol would be used to in your coworker model, the degree of conservatism that would be built into it for the very reasons that Sam just described. And I think everybody is on track on this one.

DR. BEHLING: This is Hans Behling. I just was going to ask Bomber a couple of things. I think in the last meeting we agreed that perhaps you would redo the numbers that I
crunched when I wrote my initial Finding Number Four, and I gave data in behalf of Operator AAA and Operator BBB, and came to some conclusions that the pre-June 13th, 1963 period, the numbers that are being proposed for use are considerably lower than what you would expect if you actually used the bioassay data, and then backfitted the intake. And as I've mentioned, in a couple of instances if you use, for instance, Type M for the Operator AAA, you would end up underestimating his intake by approximately 15 fold. And I believe Jim Neton had mentioned that they would perhaps redo my numbers just to verify those numbers to see if those numbers are, in fact, numbers that they also came up independently with. So, my question is did -- was anybody there to look at those numbers to verify my initial estimate as I identified in Table 4 of my writeup.

MR. RUTHERFORD: Yes, Hans. I
appreciate you bringing that up. We are looking at that, and that will be -- again, we'll be ready to address that, as well, when we address this whole issue shortly after the Board meeting in February.

DR. BEHLING: Yes. Also, the other issue that I think was brought up at the very terminal end of the last meeting was perhaps for consistency only, is that in the thorium assigned values as was defined in your White Paper Number Three, you elected to go to the 95th percentile value as a default number. And I guess our question, as raised by John and myself during the meeting was how can we have in the same paper two default values, one at 50, the other one is 95 percent. And should there be some consistency?

MR. RUTHERFORD: Well, we want to remind you, though, that the thorium was based on air sampling data. And this was a -- uranium was based on bioassay, so there is a

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difference there. But we will address -- I think when we address the 95th versus the 50th percentile for the gap, I think that will hopefully take care of that issue. Okay?

DR. MAURO: Okay.

MR. RUTHERFORD: Now, the second C- -- you want me to -- Henry, do you want me to jump to the second issue on that?

CHAIRMAN ANDERSON: Yes, right.

MR. RUTHERFORD: Okay. The --

CHAIRMAN ANDERSON: It seems like we're making headway and we're --

MR. RUTHERFORD: Yes, the second--

CHAIRMAN ANDERSON: -- at the '61-'62 issue.

MR. RUTHERFORD: Yes.

CHAIRMAN ANDERSON: I just wanted to be sure this was not something that we had to reopen an SEC petition or something.

MR. RUTHERFORD: No.

CHAIRMAN ANDERSON: Good.
MR. RUTHERFORD: The second issue actually was brought up by Bill during our discussion on the air data, actually 1962. Further examination explanation of air sampling frequency changes for specific locations during the '61 to '62 period.

Bill had asked about the -- why the change in frequency. I think the example that was given to us was the green room. If you looked at the green room in 1961, I think there were 36 data points. You looked at the green room in 1962 there were only four data points. And I think we were just asked to look back and see if we could understand why the frequency change. And we are looking into that.

The difficulty is that there's a number of things that can drive that; one being, you know, if the actual production work that was going on during that period changed, you know, in the green room, then the actual
air monitoring data could be different from one year to the next.

There's a number of issues. We are looking at that to see if there's any significance to that, and we will be able to report on that again shortly after the Board meeting.

MEMBER FIELD: I appreciate that, Bomber.

MR. RUTHERFORD: All right. No other questions on that. I've talked about --

CHAIRMAN ANDERSON: What's the interviews?

MR. RUTHERFORD: Yes, I'm going to talk on the -- yes, the classified interview. That is really the big issue. Honestly, we would have tied everything else up earlier if it -- we could have gotten this thing resolved.

We have worked for the last two and a half months on this getting this
interview scheduled. The initial difficulty was determining the proper location to conduct the interview, and finding something that really was amendable to this individual getting there. Actually, we had even worked out where we would possibly pay him to get him to this location to cover some of the expenses.

So, we were initially working on that. We got that resolved. And then the individual had to have some surgery, and has been unavailable to us now for the last couple of months. In fact, we've had extreme difficulty contacting the individual. We've left messages with -- well, we haven't left messages with him because he doesn't have an answering machine. We've left messages with his representative, and we've also talked to the petitioner who has been trying to contact, to get in touch with him to see if we can get this set up.
So, right now -- we will even make calls again today. We've made calls routinely to try to get this thing set up to go through. And I'll remind you, the discussion around the interview is this individual worked at the item plant. He felt there was not a lot of discussion, and I tend to agree with him, there wasn't a lot of discussion in the Evaluation Report about the item plant. And he was an item plant technician who he felt he could give us some good information that he was concerned may not have been covered. So, we are continuing to work on that to get that interview set up. And I can't tell you much more than that.

CHAIRMAN ANDERSON: Okay. Any other questions?

MR. RUTHERFORD: I have one more thing I wanted to bring up.

CHAIRMAN ANDERSON: Okay, go ahead. Go.
MR. RUTHERFORD: We did receive correspondence from a claimant concerning their -- this claimant's husband who had worked at United Nuclear, and some concerns by that claimant on the -- at least the thorium portion of our dose reconstruction process.

The claimant had indicated that they felt that there was no monitoring, and that because there -- and that we had used actually air data for other radioactive materials to reconstruct exposures.

I wish that individual was on line right now, but I do want to get it on record that -- and, of course, we do have air monitoring data for the actual thorium work. That included not only general area samples, but a significant portion of the 210 samples were breathing zone samples which are a direct indication of worker exposures.

So, we did have that information. I wanted to clarify that to them, and since
she is not on the phone call now I will make
sure that I contact her and at least pass that
along to her and clarify these points during
the conversation.

She also had provided us a copy of
an article -- actually, it was a study on
thorium exposure to the liver. And I'm going
to pass on to somebody a little smarter than
me when it comes to this to discuss this. I'll
pass this on to Jim Neton.

DR. NETON: Okay. Yes, this Jim.
She attached -- the person attached a copy of
a review article from the Journal of Medicine
that was printed or issued September 2007. The
title is "Thorium dioxide-related
haemangiosarcoma of the liver." And I'm not
exactly clear why it was included other than
to point out that thorium does cause -- has
been demonstrated to cause cancer in the
liver. And we certainly don't have any issue
with that.
It was actually a very interesting article. It was a person who had died of liver cancer, haemangiosarcoma of the liver, and upon autopsy they realized that the person had a thorotrast injection which was fairly commonly used years ago to try to help in imaging certain organs, particularly the liver and bone. And the point of the article was these liver cancers are rare, but they do occur because of this thorotrast injection. And we note that that is true, so there's nothing more to say on that other than our risk models do account for the fact that liver cancer is a possible outcome of thorium exposure. That's all I have to say about unless there's any questions.

CHAIRMAN ANDERSON: No, I don't have any.

MR. RUTHERFORD: Well, I think that's it for United Nuclear for us. Again, we should be able to address the technical issues
shortly after the Board meeting. Hopefully, we can get some kind of information from this person to interview that I can give you -- at least give you a better feel for when this interview will be conducted. I know that SC&A is standing by to support us with it. And as soon as we get some more information, we'll get to it.

CHAIRMAN ANDERSON: Okay, thank you. So, we should be able to wrap that up fairly soon. Okay. I don't -- are there any public comments on United Nuclear? I don't think anyone signed up, but now is your chance if you want to comment on any of these issues.

Okay. With that, let's move on to Baker-Perkins.

MR. ALLEN: Who do you want to take this? This is Dave Allen. I can discuss the White Paper I sent since our last meeting.

CHAIRMAN ANDERSON: That's a good idea.
MR. ALLEN: And SC&A has responded to that. And, John, you can correct me if I'm wrong, I think that was Bill Thurber.

DR. MAURO: No, that was actually a team of us. I was very much involved, and Aris Papadopoulos is on the line. Bill is also involved to a certain extent, because he's involved with a lot of AWE work. But, yes, we're in a position where we could discuss with you our review of your paper.

Our review actually came out on January 17th, about a month ago, and it was very favorable. Basically, we completely support -- we reviewed your White Paper. And this might be an easy one, and for the reasons described in our report we concur completely with your position on all matters.

MR. ALLEN: Okay. I don't want to belabor it any more unless Dr. Anderson wants to hear any briefing on the White Paper.

DR. NETON: Maybe Dave could
summarize what the crux of the White Paper issue was.

CHAIRMAN ANDERSON: Yes, since we do have some public comment it might be helpful to get on the record just a quick summary of it.

MR. ALLEN: Okay. A real short brief summary --

CHAIRMAN ANDERSON: Real short.

MR. ALLEN: We at one point had an appendix to TBD-6001 for Baker-Perkins. We cancelled TBD-6001 I believe last year and rewrote a standalone Technical Basis Document for Baker-Perkins. Before we could do that, SC&A did a review of the appendix.

After that, I suggested that they review the new TBD because we did have to make some changes, and SC&A did do that. And I don't recall the date that that was done. Actually, I believe that was November, submitted their review of this TBD.
We discussed it in our last Work Group meeting which was towards the end of November of last year, and during that, they had a few findings or questions. And it was agreed during the Work Group meeting that I would put together between the air sample data and a log of the testing that was actually done at Baker-Perkins, we could put together a time line of the short five-day operation that occurred there.

I did that in a White Paper, sent it to the Work Group, and SC&A reviewed that White Paper, as John just mentioned, and sent the review to the Working Group last month.

And, in short, it was like I said approximately a five-day operation to test a Ko-Kneader that they wanted to mix uranium trioxide with a water and ammonia mixture. They tested it on a P-type Ko-Kneader and a K-type Ko-Kneader. Neither was apparently successful for -- I think it was the heating
is where they had a problem. The material kept heating up and they couldn't do it on a continuous basis.

But, in any case, we had air samples for the setup, for the testing itself, and then for the decontamination of the equipment. And with the test -- the log of the test itself, it included flow rates of dry material going into and out of -- or dry material and wet material coming in and out of the machine, and the times for all the flow rates. And the White Paper puts together all of that to come up with a total amount of material that went through the machine, which was equivalent to approximately a 55-gallon drum of UO₃, uranium trioxide, which was one of the questions SC&A had. And as John said, in their report they seem to be satisfied with the answer we came up with.

The last thing we should mention is part of that White Paper, they were
somewhat critical of the intake estimates in our TBD. And we agreed that there was some issues with that intake estimate, and definitely something that could be misinterpreted.

The White Paper redid that estimate to make it more -- I can't think of the word I'm looking for, but it was more based on the physical aspects of the test versus just the mathematics of the air samples themselves. And some difference, not a substantial difference, but there is some differences in the intake estimate. And that then has to go into a revision for the TBD.

Since we're in the position we're in, we felt it was worth SC&A and the Work Group weighing in on the White Paper to decide if there's any more issues, or if that's it, and then we'll revise the TBD. How is that for short?

CHAIRMAN ANDERSON: That sounds
good. Thank you. Bill Field, do you have any questions?

MEMBER FIELD: No, but thanks for the good summary.

CHAIRMAN ANDERSON: Yes, I think that's always helpful to have that, especially to have it in the written record, because most people only look back at the most recent minutes.

Okay. If there's no other comments, I'd like to open it up to the public if you have comments. Ted, do you have specific names of people who are interested?

MR. KATZ: I thought I heard -- I thought someone from Baker-Perkins did join us from the public at the outset of this meeting.

MS. MURAWSKI: Yes, I did.

CHAIRMAN ANDERSON: Go ahead.

MS. MURAWSKI: Is Dr. Anderson available?

CHAIRMAN ANDERSON: Yes, I'm here.
MS. MURAWSKI: Okay. Dr. Anderson, you did receive my letter, I had some concerns for that with your Work Group.

CHAIRMAN ANDERSON: Yes.

MS. MURAWSKI: Yes? Okay.

CHAIRMAN ANDERSON: And we shared that with the Work Group and the Board.

MS. MURAWSKI: Oh, you did?

CHAIRMAN ANDERSON: Yes.

MS. MURAWSKI: We haven't been notified of any meeting. If I didn't check the website I wouldn't have known even about this one. I mean, you're doing White Papers and dose reconstructions and no one is being notified of anything.

CHAIRMAN ANDERSON: Ted, do you want to comment?

MR. KATZ: Well, I'm not sure where the ball is falling through, because when we received your email, I'm certain that I forwarded that to Josh Kinman at NIOSH, who
would have given you information about this meeting come up, and so on. But Josh doesn't work for me. I don't -- I can't verify anything, but I do know that we've been communicating about this. We shared your letter with Josh and others, so I'm not sure where the ball could have fallen through.

MS. MURAWSKI: Okay. I kind of have a question. I know any time you can screw with the data any way you want. There was one paid claim to Baker-Perkins, so why does this claim make a difference from the other claims that have been filed?

CHAIRMAN ANDERSON: That wouldn't be something that the Board would have information on. I don't know if NIOSH does.

MS. MURAWSKI: Okay. So, who would I contact at the Board?

CHAIRMAN ANDERSON: I mean, the Board doesn't look at individual, or approve the individual claims. That's all handled...
through NIOSH and Department of Labor.

MS. MURAWSKI: Do you have a point of contact there that I could contact?

MR. KATZ: Yes. This is Ted Katz again. Again, Josh Kinman is normally the person who interacts, I believe, on the -- so, in your case with claimants, this is -- are you speaking with respect to a claim -- your claim?

MS. MURAWSKI: My claim, any of the other claims that have been filed with Baker-Perkins.

MR. KATZ: Right. But, I mean, you wouldn't have a right to information about other people's claims, only about your own.

MS. MURAWSKI: It appears it's just different dose reconstructions for different claims that are made.

MR. KATZ: I guess -- I think the right point of contact if you have questions in general about how dose reconstructions are
being done for Baker-Perkins, again would be Josh Kinman. And someone at DCAS can give you a number to call to get a hold of Josh.


MR. KATZ: Kinman, K-I-N-M-A-N.

MS. MURAWSKI: Okay.

MR. KATZ: But someone on the phone from DCAS please speak up and let her know who to contact.

MR. ALLEN: We'll get Josh to contact her. I thought he -- we thought he had contacted her about this meeting, too, but we'll double check on that, and we'll let Josh contact her to find out specifically what information she wants there. But we cannot, as you said, discuss other people's claims with her. I'm not sure if Josh will be the one that will be able to answer your question specifically, but he can hopefully narrow it down and get you to the -- then transfer you to the right person.
MS. MURAWSKI: Okay.

MR. KATZ: Right.

CHAIRMAN ANDERSON: Right.

MR. KATZ: Thank you, David.

CHAIRMAN ANDERSON: Any other comments people have? Hopefully, we can get this communication worked out better. You just -- you need to know all of the -- that the Board does not communicate in writing and things directly to individuals, so like your letter would be shared with everyone. It may get discussed at our larger Board meeting, but typically we would -- most of these questions would be -- that you had are ones that would be addressed by NIOSH, not by the Board. So, it was forwarded to NIOSH. I don't know if there's anyone from NIOSH that can -- wants to comment on some of her points? Most of these are related to dose reconstructions.

MR. ALLEN: Yes, this is Dave Allen. I can try to go through some of the
points in this letter, but I mean most of them actually weren't so much related to dose reconstruction in the form of what the value should be. It seemed to be many of them were related to the idea that whether or not we could accurately do any kind of a dose reconstruction.

And, Ms. Murawski, you can correct me if I'm wrong, that was the impression I got from -- as the general overview of the letter. But, in any case, that is kind of the opposite of where we're usually at. That's an SEC-type of issue, and I believe there was an SEC petition filed for this site at one point. And that one had been decided already to deny the SEC, I believe largely because of the five-day operation.

MS. MURAWSKI: What do you mean a five-day operation? I was told when I worked with Laurie Breyer to put a full year in there.
MR. ALLEN: I think at the time the Department of Labor often will just put down the years of operation. And at the time they had to cover a year of the -- or they just put down 1956 as the covered period.

After that time, the more specific information came out and they revised that to May 14th through May -- I'll get the right date here.

MS. MURAWSKI: 19th or something like that, I think.

MR. ALLEN: Yes. Essentially, it was the one particular week in May of 1956, is what they revised the covered period for. But, in any case, as far as the TBD goes, the Technical Basis Document, the issues of concern for the Technical Basis Document is what values we're using, and whether we're correctly analyzing the data, should we use a different value or analyze it differently.

It separates somewhat from the
issue of whether or not it can even be done. Whether or not it can be done is an SEC issue, and they would require a petition for an SEC, et cetera.

And, honestly, I think all the issues with Baker and Perkins have been addressed by the Board, and a decision has been made on that. If you feel there is something that was not addressed in that Evaluation Report and that whole SEC evaluation, you can file another petition. If we find that it's something that was addressed then the petition wouldn't qualify for evaluation. But you can -- you are free to do that with some sort of issue that you feel wasn't addressed, or with new information if you have that at any time.

Other than that, as far as this particular Work Group and working on the Technical Basis Document issues themselves, I can't say I could pick out a part of your
letter where you were disagreeing with the number and felt it should be a different kind of number.

MS. MURAWSKI: I guess I'm looking at the claim that was paid. I have a copy of it, which you have in the letter. Why were there different values based on that claim versus my claim?

MR. ALLEN: I can't really discuss the individual claim, but in general I can say that when the program was starting out we did claims with some information, and then as new information came to light, we revised our methodology. And any time we did claims with some gaps in information we tried to fill those gaps with favorable assumptions. So, it's fairly often that when we get enough information to fill those gaps adequately, it's not unusual for the estimates to be reduced to -- based on a more robust analysis, or better information. I don't know if that
satisfies you or not.

MS. MURAWSKI: Well, I'll look at it through more -- and when is the next Board meeting then?

DR. NETON: It's at the end of February.

CHAIRMAN ANDERSON: The 28th and --

DR. NETON: The 29th.

CHAIRMAN ANDERSON: The 29th in Oakland, California.

MS. MURAWSKI: Okay.

CHAIRMAN ANDERSON: And I think there will be opportunity to call in there, won't there?

MR. KATZ: Yes, there will be public comment on the first evening, if you want to do that. The Board isn't taking up Baker-Perkins at the February Board meeting, but that doesn't mean that you can't comment on Baker-Perkins even though it's not on the agenda to be discussed by the full Board.
I mean, one thing that will happen probably is, Dr. Anderson -- he'll report on the Work Group activities including this, let the Board know where things stand.

CHAIRMAN ANDERSON: Just to summarize, as far as our Work Group activities, it seems to me all of the TBD issues are now closed. Bill Field, do you agree with that?

MEMBER FIELD: As far as I can tell.

CHAIRMAN ANDERSON: Yes. So, it seems to me as it relates to the TBD, our -- and since this isn't going to be until the June meeting formally, we can check with others to see if they disagree, but I guess I would -- I'm prepared to say from the Committee standpoint and the review process as it relates to the TBD and the conversion from an appendix at 6001 to a standalone, we're satisfied that's been completed, and
descriptive terms and all is sufficient and adequate. So, Bill Field do you agree with that, I think we can make that a motion.

MEMBER FIELD: Yes, I agree.

CHAIRMAN ANDERSON: And then that will be ready to put on the agenda in June. And I'll report on that out in Oakland. So, I'll second that and we're all in agreement, so basically -- not basically, but the TBD is now complete, as long as the issues we've all discussed, we haven't seen a revised TBD but that will be the last thing that we will want to keep on a tickler file to be sure that the written document is finalized.

So, are there any other issues? And a question for you, Ted. Do we have any other sites on the 6001 that we need to -- these three are pretty well completed, so I just don't remember what else we have that we need to -- we may just want to alert those public that are on the phone what one may be
MR. KATZ: Sure, Andy, this is Ted. So, we do have -- we've actually made great progress with this Work Group. We also have DuPont Deepwater.

CHAIRMAN ANDERSON: Okay, that's right. Yes.

MR. KATZ: We haven't discussed that yet, but that would come next.

CHAIRMAN ANDERSON: Yes.

DR. MAURO: And, Ted, just to point out, SC&A has reviewed that Site Profile and we did file our findings and a report to the full Board, so it's really -- I guess the ball is in NIOSH's court to take a look at those findings.

MR. KATZ: Right. And we want to have an initial response through DCAS in advance of whatever we need to discuss.

CHAIRMAN ANDERSON: Is this a TBD or a SEC?
DR. MAURO: TBD.

CHAIRMAN ANDERSON: Yes. Do we have any other SEC --

MR. KATZ: I think that's it for this Work Group.

CHAIRMAN ANDERSON: Okay.

MR. KATZ: So, do you want to try to schedule for a Work Group meeting that would perhaps take up DuPont, and put to bed the last issues with United Nuclear?

CHAIRMAN ANDERSON: I would say let's try to do that probably without -- I don't know the DuPont issues. Is that something we ought to have a face-to-face?

MR. KATZ: That's a good question for John, I think, Mauro.

DR. MAURO: You know, I haven't looked at it in a while because it wasn't on the agenda. But I do remember we did -- it was not -- it wasn't something -- it was something of significance. We did have a number of
I could take a look at it. I haven't looked at it since we prepared it a while back, so I don't know if we have any comments there that are going to require a face-to-face.

CHAIRMAN ANDERSON: We can have a spreadsheet with all sorts of comments and listings. It's hard to do that.

DR. MAURO: I could probably look it up real quickly while we're --

CHAIRMAN ANDERSON: No, we aren't going to schedule anything until after the Board meeting.

DR. MAURO: Yes, okay. I was just going to go look it up under my -- I'm actually in front of my computer right now, and in about one minute I could probably check to see if there's anything of great -- okay. I'm having a little trouble tracking it down. I wish I could give you -- I can't give you an
CHAIRMAN ANDERSON: Let's send out an email. You sort of know when the other Work Groups are meeting, and when NIOSH folks are available, so let's look for probably March-April.

MR. KATZ: Right. I'll take care of that once John looks into this question, and we have a sense from DCAS that -- well, we already know that they'll be ready by some time in March for United Nuclear.

CHAIRMAN ANDERSON: Yes.

MR. KATZ: That sounds good. We'll take care of that.

CHAIRMAN ANDERSON: Good. Are there any other issues people have? And, Ted, I'm not asking our group to take on anything more. Okay. We'll try to touch base with Mark on this, as well, probably before the meeting so that he -- you can kind of bring him up to speed.
MR. KATZ: That would be great.

Thank you, Andy.

CHAIRMAN ANDERSON: So, with that if there's no other issues, I think we can adjourn. Anyone else on the phone have any last comments?

DR. NETON: None here.

CHAIRMAN ANDERSON: Okay. So, with that we'll adjourn, and appreciate everybody calling in, and I think we're making great progress. And we'll look forward to the writeup prior to the meeting.

DR. MAURO: Yes, we'll get something -- I know that this is a hot potato. We'll get something --

CHAIRMAN ANDERSON: Yes.

DR. MAURO: Yes, Electro Met quickly as possible.

CHAIRMAN ANDERSON: That's great. That's really our only major pressing issue right now. Thanks a lot, John.
DR. MAURO: Bye-bye.

(Whereupon, the above-entitled matter went off the record at 3:10 p.m.)