UNITED STATES OF AMERICA

CENTERS FOR DISEASE CONTROL AND PREVENTION

NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY
AND HEALTH

ADVISORY BOARD ON RADIATION WORKER HEALTH

BLOCKSON WORK GROUP

FRIDAY,
JANUARY 23, 2009

The work group convened via teleconference at 12:30 p.m. Eastern Standard Time, Wanda Munn, Chair, presiding.

WORK GROUP MEMBERS PRESENT:

WANDA I. MUNN, Chair
BRADLEY P. CLAWSON
JIM M. MELIUS
GENEVIEVE S. ROESSLER
IDENTIFIED PARTICIPANTS PRESENT:

TED KATZ, Acting Designated Federal Official
LARRY ELLIOTT, OCAS
JIM NETON, OCAS
TOM TOMES, OCAS
JOHN MAURO, SC&A
BOB ANIGSTEIN, SC&A
HANS BEHLING, SC&A
STEVE OSTROW, SC&A
CHICK PHILLIPS, SC&A
LIZ HOMOKI-TITUS, HHS
MR. KATZ: Okay. Then so let me kick this off with -- starting with roll call. Again, this is Ted Katz, and I am the acting designated federal official for the Advisory Board and for this work group call.

If we could take roll call then beginning with the Board members. Wanda, if you would self-identify and please, of course, address conflict of interest, as well, with respect to Blockson Chemical Company.

CHAIR MUNN: This is Wanda Munn. I'm Chair of the Blockson Work Group. I have no conflict.

MEMBER ROESSLER: This is Gen Roessler. I'm a member of the Blockson Work Group. I have no conflicts.

MEMBER MELIUS: Jim Melius, member. No conflicts.

MR. KATZ: Okay, and Brad is still not with us. Okay. Now OCAS/ORAU team please.
MR. ELLIOTT: This is Larry Elliott. I'm the Director of NIOSH's Office of Compensation Analysis and Support. I have no conflicts regarding Blockson Chemical.

MR. NETON: This is Jim Neton, NIOSH OCAS. I have no conflict at Blockson Chemical.

MR. TOMES: This is Tom Tomes, NIOSH OCAS. I have no conflict.

MR. KATZ: Okay, then SC&A please.

MR. MAURO: This is John Mauro, SC&A. No conflict.

MR. ANIGSTEIN: Bob Anigstein, SC&A. No conflict.

MR. BEHLING: Hans Behling, SC&A. No conflict.

MR. OSTROW: Steve Ostrow, SC&A. No conflict.

MR. PHILLIPS: Chick Phillips, SC&A. No conflict.

MR. KATZ: Okay. Other federal employees or federal contractors? Liz? Liz
Homoki-Titus, are you with us still?

   MS. HOMOKI-TITUS: I'm sorry. Yes.

   Liz Homoki-Titus. I didn't realize you called for federal employees, with Health and Human Services.

   MR. KATZ: Any others? Okay. Then how about petitioners from Blockson? Okay. How about Congressional representatives or members -- representatives of congressional offices?

   Okay, and then how about -- any other members of the public on the phone who want to self-identify? Okay then. Then I just would remind everyone on the call when you're not speaking to please mute your phone and use *6 if you don't have actually a mute button so that sound from your phone won't interrupt the call.

   Wanda, it's all yours.

   CHAIR MUNN: Thank you, Ted, and thank you, all, for joining us this morning. Did I just hear someone come online?
MR. MAURO: No. That was me just putting on the mute button.

CHAIR MUNN: All right. Fine. Thanks, John. I hope that all of you have received my extremely last moment list of items, which I have listed as outstanding. Has anyone not received that that needs it?

It's a brief list. I think we've worked most of the issues to their conclusion. There are only one or two outstanding that I want to make sure that everyone feels comfortable that we have covered.

If you all have that list and don't have any addition to it, then we'll proceed from the top. Any additions? All right.

Let's start with my asking for assurance from all the Work Group members that you've now had time to adequately review all of the documents that we have generated during our several months of activity regarding the Blockson site.

Is everyone content with having
those documents reviewed now? I'm especially concerned that the white papers having been generated without specific anticipation that they were going to become a part of a permanent record.

I should say perhaps not properly identified as going to be a part of the permanent record as all at one time or another been reviewed by the folks involved. I have one question, too.

I have no feel not having checked myself for whether those white papers that we generated were appropriately added to the O: drive as data for the Blockson site. Have they been? Do we know, Jim?

MR. NETON: Wanda, I think all the ones we're aware of are out there. I don't know with the possible exception of this latest email, the December 23 email, I think they've all been loaded out on the O: drive.

CHAIR MUNN: Good.

MR. NETON: I'll certainly check
and verify and make sure that everything is there.

CHAIR MUNN: I would appreciate it if you would, and that's one of the things I will ask you about before the Albuquerque meeting.

Then has everyone also had an opportunity to see the email to which Dr. Neton just referred? His December 23, 21, whichever it was, email with respect to the radon information from Mallinckrodt?

Hearing no concerns about that one way or the other, then I wanted to very quickly go over some of the things that we have, I believe, followed up on at one time or another during our discussions.

We have in the first place addressed all of the seven original findings that our contractor had brought to use on their review of the site profile.

As you recall, the site profile was redone because of some shortcomings with the
original document. We looked at both of them focusing, of course, on the final document.

The findings that came back to us from SCA as a result of that included concerns about the default upper bound of uranium intake inhalation had to do with the thorium-232 enrichment ratio and the process strain.

Another thorium-230 concern about not being included in exposure matrix. We spent a significant amount of time addressing concerns relative to the thorium raffinate stream. Put that to bed.

The request for additional data needed to support the radon values that were used and I believe the tail end of some of those concerns is the only thing outstanding for us to discuss today.

We talked about exposure from the tailings. There was a concern about that, which was discussed and agreed to. Then there were trace levels of radium-226 and progeny effects that we addressed.
Is my characterization of those items and their current status accurate to the memory of all of the Work Group members?

MR. MAURO: This is John. Yes, that's my understanding also.

CHAIR MUNN: All right. That's good. If I don't hear back from somebody with respect to that characterization, that will be the characterization I will make before the full Board in Albuquerque.

Now, the most recent and only outstanding concerns that I have on my list have to do with concerns that were expressed specifically by Mike Gibson and by Dr. Melius.

Mike Gibson indicated that he was not comfortable with the method that was being used in approaching the dose reconstructions. We discussed that at some considerable length at our last teleconference.

I'm sorry Mike isn't here because I would like to pose the question to him as to whether the discussions regarding that method...
have made him more comfortable with where we are and whether he agrees that these methods are acceptable.

His absence makes it impossible to ask those questions, so perhaps I can do that by email after this is over. The other -- the validity of the model process also included --

MEMBER CLAWSON: Excuse me. Wanda?

CHAIR MUNN: Yes.

MEMBER CLAWSON: This is Brad calling in. I hate to interrupt, but I'm right in the middle of moving fuel and they've given me about two minutes.

I've called Ted and left a message. I got forced and we've got to get a shipment out of the INL here, and I apologize, but I will not be able to meet this meeting.

CHAIR MUNN: All right. I'm sorry. We'll miss you, Brad, but --

MEMBER CLAWSON: It's no problem. I left a message on Ted's answering machine at 4:30 this morning, but I just wanted to make
CHAIR MUNN: Well, I'm glad you called us. Thank you very much. Go do what you have to do and stay safe.


CHAIR MUNN: Thank you. So, the issue revolving around the validity of the model process and Monte Carlo methods were a major topic of discussion. You have the -- I hope all of you have the minutes from our last discussion and have reviewed them again.

I'll ask the people who are on the call here today, has that discussion and your review of that discussion resulted in your acceptance of the validity of the model process and the Monte Carlo methods?

Are those going to be acceptable to you? Gen?


CHAIR MUNN: I was asking about our
concerns that were discussed at our last teleconference regarding the validity of the model process and the Monte Carlo methods that were used in it.

I was asking whether the result of those discussions was an increased comfort and acceptance of what we have used to this point. Do you find the model process valid and the Monte Carlo methods used it in valid?

MEMBER ROESSLER: Absolutely. In fact, I think I brought that up at our Work Group call, and I think during the call the comments that were made by Jim Neton reminding us of some of the things that are in the record confirmed that we are using the very best scientific process.

So, I'm completely comfortable with that as it applies to Blockson and as it applies to any of the work groups or any of the facilities we work with.

CHAIR MUNN: Dr. Melius?

MEMBER MELIUS: I still have
concerns about the model.

CHAIR MUNN: Do you have concerns about the model that we can address?

MEMBER MELIUS: Well, I have some—before we get updated, other than the one communication on Mallinckrodt, has there been any other technical update from either SC&A or NIOSH?

MR. MAURO: Jim, this is John. I don't believe there's anything new from SC&A. Everything that we have prepared has been delivered. I believe Jim's material regarding Mallinckrodt was the last piece of technical information that was delivered on the subject.

MR. NETON: Yes, this is Jim. That's correct from NIOSH's side.

MEMBER MELIUS: Thanks. Was there any discussion or issues raised at the Board meeting after I left? I believe that this was presented then. I can't recall the exact sequence.

CHAIR MUNN: At the Board meeting
or at the teleconference?

    MEMBER MELIUS: Board meeting also.

    MEMBER ROESSLER: Jim, we haven't

    had a Board meeting since then --

    MEMBER MELIUS: No.

    MEMBER ROESSLER: -- have we?

    MEMBER MELIUS: Before that.

    MEMBER ROESSLER: I don't understand your question, Jim.

    CHAIR MUNN: There would have been

    -- I don't recall any additional concerns

    being raised at the Board meeting. Frankly, I

    did not go back and review the Redondo Beach

    minutes.

    It would, of course, be included in

    the Redondo Beach minutes, but I have not done

    that. So, that's one of the -- I guess we

    would have to ask whether you had an

    opportunity to do that because I, frankly,

    have not reviewed the Redondo Beach minutes.

    MR. KATZ: Wanda? I'm sorry.

    CHAIR MUNN: Has anyone else
addressed Jim's question?

MR. KATZ: I guess I need clarification. Wanda, you're saying Redondo Beach. Are you meaning Augusta?

CHAIR MUNN: I'm sorry. Augusta. I still have Redondo Beach on the brain.

MR. KATZ: You know, I haven't reviewed the transcript from Augusta, but as I recall, there wasn't really the substantive discussion about Blockson there. It was just an update of where things stand and that there would be another Work Group meeting.

But, so there was no moving forward on any issues with the weather, but there was really no discussion, substantive discussion as I recall it.

CHAIR MUNN: I don't recall any either, and I, frankly, don't recall any discussion that would center on this topic outside of the Blockson arena.

So, I guess the answer to your question, Dr. Melius, is so far as I know, no,
there has not been.

MEMBER MELIUS: Okay. No, I'll take your word for it. I just wanted to double check.

CHAIR MUNN: I don't believe there has been. The other item that was -- excuse me. Let me start over again. The other item regarding the model was simply whether -- as I recall, the concern was whether one should even be used. I think we've put that to bed.

The other is whether the model is an adequate model. I believe, if I understand Dr. Melius correctly, you're saying it's not an adequate model in your view.

MEMBER MELIUS: Correct.

CHAIR MUNN: All right. Is there anything we can do to make it adequate?

MEMBER MELIUS: If there's no new information, I'll just have to continue to review what has already been generated.

CHAIR MUNN: All right. If you could do that --
MEMBER MELIUS: I do have one question for NIOSH. Is it NIOSH's plan moving -- how is NIOSH going to deal with radon? Sort of similar radon exposure situations at other sites? Are you going to use the old procedure or are you going to use this model?

MR. NETON: Well, I think -- this is Jim. That would depend on the site, what type of information were available. But, I guess I can't speculate too much, but if we had a similar situation where we knew the source term and the production rates as well as we did here and had no monitoring data, we would approach it, I assume, similarly.

But, some sites we do have radon monitoring data we'd use preferentially over first term.

MEMBER MELIUS: Yes. So, you wouldn't use the, sort of I call it, the Florida data procedure?

MR. NETON: No. No. We believe that this model addresses the full level of
uncertainty that exists in a facility such as this. It works -- it eliminates the issues related to -- the Florida issues related to the building being more open and that sort of thing and the time frame issues, as well, which were problematic with the Florida data if you recall.


CHAIR MUNN: So, is there any kind of an exchange that could take place between now and our meeting in Albuquerque that would bring you more comfort with respect to this or any closer to accepting it as being adequate, Dr. Melius?

MEMBER MELIUS: I'll talk to some other Board members and see.

CHAIR MUNN: If you would, I'd appreciate it. I would also appreciate it very much if you could relay that information to me when you have it. I'd like to incorporate it into my report when we begin
our discussion at the full Board.

So, if you'll relay that kind of information to me, it would be very helpful. Can that be done?

MEMBER MELIUS: Yes, I suppose so. Yes.

CHAIR MUNN: Yes, good. I'd appreciate it. That pretty much takes care of my next bullet there. Do members now accept as appropriate? The answer is not fully yet.

The final bullet that I had was the one which we discussed earlier and did not come to any conclusion with respect to Dr. Melius' concern on the quality of the data.

I'm sure whether there's anything that can be said additionally that would be assuring in that regard, but if there is, now is probably the time to say it.

Dr. Melius, if you have any specific points with respect to quality that you would like to bring to us that we could
address or that might be addressed between now and our next meeting so that we can wrap this up, it would be most helpful. Do you have any --

MEMBER MELIUS: I have nothing further to say.

CHAIR MUNN: No specification with respect to how we could improve your concern about the adequate quality of the data? Okay. Then we have come to the end of the points that I wanted to cover.

I want to review for us what we did the last time we addressed this before the Board. At that time, we had asked the Work Group three questions.

We had said that SC&A had identified those seven findings and we had considerable discussion and follow up on those. They have all now been resolved. Did you -- would you accept that report? We got four unanimous votes, a yes, that it was accepted.
Then we indicated that NIOSH had sought information in depth for all of the activities on that site, and they have -- believe they have adequate data to reconstruct and bound the radiation dose. Do you accept that report? We had two yes votes and two no votes.

Then the third question that was asked was -- I guess we didn't -- the site profile has been rewritten and reviewed and revised. Do you accept the current site profile? We had two yes votes and two no votes.

It appears to me that that question still remains a valid one. Don't know whether that has changed since -- in the three months intervening or not.

We don't have our fourth member here to respond to that question, but we can reach him by email and pose the question again if that seems to be feasible.

I would like to be able to identify
whether there is any change in the position of
the answer to that question as to whether the
current site profile is acceptable.

So, I guess I still believe it's
acceptable. Dr. Melius, do you feel that that
site profile is acceptable with the exception
of the concerns that you've expressed already
or do you still not feel that the current site
profile is adequate?

MEMBER MELIUS: To tell you the
truth, I don't recall all the issues with the
site profile. I'd have to go back and look at
it. I've been focusing on the SEC issues.

CHAIR MUNN: Would it be fair to
ask if I might send that question to you and
to Mike and ask that you give it some
consideration and get back to me prior to the
time I prepare my presentation for the Board
in Albuquerque? Is that a fair request? Will
that do?

MEMBER MELIUS: Yes.

CHAIR MUNN: Good. All right.
Then that's what I will do. I'll send that request and ask at this juncture -- until I get responses from those, I won't be able to say much more than what we've covered before -- when I make my report to the Board if I am understanding what I believe our discussion here has led us to, then we are essentially, at this moment, still at the same point where we were when we began these most recent discussions.

That is, we have two of the Work Group members who support the NIOSH recommendation. We have two members of the Working Group who do not support it for the two reasons given in our earlier discussion here.

Is there anyone who finds any incorrect inference in those statements?

MEMBER ROESSLER: Wanda, I don't, but I would like to make a comment.

CHAIR MUNN: Please do.

MEMBER ROESSLER: In looking at
where we are on this situation, just looking at what our responsibility is as a Work Group, we were charged with evaluating the site profile and the appropriateness of the SEC petition.

It's our responsibility to bring this to the full Board so that the full Board can participate in a decision. I think it's very important at this point for the Work Group and especially you as the chair to get a concise and specific summary from Dr. Melius and from Mike and/or Brad on what their concerns are so that we come into this discussion, and in fairness to the Board, be able to present what the Work Group's evaluation is.

CHAIR MUNN: It would, I know, be very helpful to be able to provide such data. It's very difficult for the rest of the Board to have a feel for how much information has been exchanged and how thorough this particular Work Group has been.
If we can request such a thing, it would be very helpful. I will take it as an action item to very promptly place such a request on email and hopefully have the kinds of responses that I can present myself or that I can have the dissenting members present themselves at the upcoming meeting.

Which of those would be the most effective is a question that we can resolve between now and then, I think, probably amongst ourselves and unofficially, but we do want to have as much information available, as many specifics available, for the other individual advisory board groups as we possibly can.

Is Gen's suggestion amenable?

MEMBER MELIUS: Is it your intent to do a written report to the Board ahead of time?

CHAIR MUNN: Not really, unless one feels that that's necessary.

MEMBER MELIUS: I don't. That
would be my preference. I think I'm capable of presenting my own opinions to the Board.

CHAIR MUNN: I'm sure. That's not the question. The question is whether or not we need to do that in a written format or in a format before the Board at the time of the presentation. That's the question in my mind.

Would you prefer written or would you prefer a personal presentation?

MEMBER MELIUS: I thought you just told you weren't going to do a written report to the Board ahead of time?

CHAIR MUNN: I had not intended to.

MEMBER MELIUS: Okay.

MEMBER ROESSLER: I guess -- this is Gen. My point is that in fairness to Wanda, as she presents the Work Group report, it would be -- she really should have something either verbal or written from you so that she can adequately present the information in her report.

It seems rather awkward for her to
make the report and then have you follow with
your own opinion.

CHAIR MUNN: If we can include it
in one report it would be helpful.

MEMBER MELIUS: I'll try to
understand that. I -- because I don't think
Gen's -- Gen, I don't think you're trying to
tell me I can't have an opinion.

MEMBER ROESSLER: No, but I think
it catches -- as a chair of a work group, I
think it's kind of unfair to Wanda to catch
her by surprise or to totally assimilate what
you're trying to say perhaps after she's made
her presentation.

Certainly, you're have your opinion
before that, and I just think a summary of it
would be a responsible way to make this
report.

MEMBER MELIUS: I think I
understand it better. Let me think about it.

CHAIR MUNN: If I could include it
in a slide presentation even, it would be
helpful. We'll have an exchange of emails with regard to how to work this out best.

I don't think we'll be able to do it here, and I do think, perhaps, we need to verify some of the material that's on the O: drive before I put together my final report.

So, if we have any other item to discuss, this is the right time to bring it up. Otherwise, I will issue an email to all of the parties who are involved here with my understanding of the actions we are going to attempt to complete prior to Albuquerque so that the Board report to the Albuquerque meeting will be complete and fair.

If that meets the needs of all the people involved, then we can adjourn this meeting. If not, please tell me now. Thank you all. I appreciate your patience as we try to work through these and get it right.

I will try to have my email out to you early next week. Thank you all. Have a good weekend.
MEMBER MELIUS: Thank you, Wanda, and everybody.

MR. KATZ: Okay. Good bye.

CHAIR MUNN: We are adjourned.

Bye-bye.

(Whereupon, the above-entitled matter was concluded at 1:18 p.m.)