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NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH

convenes

MEETING FIFTY-SIX

ADVISORY BOARD ON
RADIATION AND WORKER HEALTH

VOL. III

DAY THREE

ABRWH BOARD MEETING

The verbatim transcript of the
Meeting of the Advisory Board on Radiation and
Worker Health held at the Millennium Hotel,
St. Louis, Missouri, on June 26, 2008.

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June 26, 2008

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TRANSCRIPT LEGEND

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-- "*" denotes a spelling based on phonetics, without reference available.

-- (inaudible)/ (unintelligible) signifies speaker failure, usually failure to use a microphone.

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P R O C E E D I N G S

(8:30 a.m.)

WELCOME AND OPENING COMMENTS**DR. PAUL ZIEMER, CHAIR****DR. CHRISTINE BRANCHE, DFO**

1 **DR. ZIEMER:** Good morning, everyone. We're beginning
2 day three of the Advisory Board on Radiation
3 and Worker Health meeting here in St. Louis.
4 We are pretty much on schedule as far as the
5 agenda is concerned. I am hopeful that we may
6 be able to get through all of our items very
7 close to noon, although I can't guarantee that
8 in advance, but we do ask everyone to move
9 along efficiently, if possible.

SEC PETITION STATUS UPDATES

10 We're going to begin this morning with a series
11 of SEC petition status updates, which will
12 include reports from some of the workgroup
13 chairs, and also in some cases opportunities
14 for petitioners to make comments if they are
15 present on line.
16

BLOCKSON, MS. WANDA MUNN

17 Our first one is the Blockson SEC petition.
18 The workgroup chair is Wanda Munn. Wanda, we'd
19 be pleased to hear your report.
20

1 **MS. MUNN:** All right, thank you.

2 **DR. ZIEMER:** I should check and see if any of
3 the Blockson petitioners are on the line this
4 morning.

5 **MR. GRIFFON:** Paul, also, I don't know if Jim -
6 - is Jim on the line?

7 **DR. ZIEMER:** Is Jim Melius on the line?

8 **MS. PINCHETTI:** This is Kathy Pinchetti.

9 **DR. BRANCHE:** She's a petitioner --

10 **DR. ZIEMER:** Thank you.

11 **DR. BRANCHE:** -- or an authorized rep.

12 **DR. ZIEMER:** Thank you, Kathy. We'll give you
13 an opportunity to speak in a moment.

14 **MS. MUNN:** A quick review of where we are with
15 Blockson, the members of the workgroup are
16 myself, Mike Gibson, James Melius, Genevieve
17 Roessler, and Brad Clawson is our alternate.
18 Blockson had two SEC petitions and qualified in
19 2006. The Technical Basis Document which
20 serves as the site profile was written --
21 completely rewritten after the first one, as
22 was pointed out to you earlier by the NIOSH
23 presentations with respect to Blockson. Our
24 technical contractor, SC&A, reviewed the site
25 profile, the SEC petition and the evaluation

1 report. Following that they issued seven
2 findings which the Board undertook to resolve.
3 Those findings -- these are -- were
4 considerably more lengthy than this. They
5 involved the default upper bound of the uranium
6 inhalation rate, the thorium-232 enrichment
7 ratio in the process stream, the thorium-230
8 that wasn't included in the exposure matrix,
9 the possible thorium raffinate stream hadn't
10 been addressed. There was a concern about
11 additional data being needed to support radon
12 values, and there's a -- wanted to verify
13 possible exposure from the tailings of that
14 operation, also concern about the trace level
15 of radium-226 and its progeny.

16 The behind-the-scenes workgroups went to work
17 almost immediately in 2006. Our workgroup did
18 not have its first official meeting until later
19 in 2007, but as I pointed out initially, the
20 entire site profile had to be rewritten and the
21 technical teams were working behind the scenes
22 all that time. We also had several meetings
23 with the workers to discuss as much information
24 as they could recall -- they were extremely
25 helpful, as a matter of fact. The workers at

1 Blockson had good memory of what the processes
2 were like and what the structures -- how the
3 structures were arranged, so it was very
4 helpful for us.

5 Each time that we identified information that
6 was going to bring one of the issues to closure
7 or would have some major bearing on our
8 decision, we tried to see that a white paper
9 was generated so that we would have a long-term
10 record of what had been found there. We were
11 very pleased when each one of the seven
12 findings that SC&A had presented to us were
13 resolved to the satisfaction of both NIOSH and
14 the technical contractor, and the chair had
15 hoped that that would resolve the major issues.
16 We had addressed additional questions of detail
17 as they had arisen -- hold on just a moment;
18 there's someone on the line.

19 **DR. BRANCHE:** Yes. We ask that all phone
20 participants mute their lines. If you do not
21 have a mute button, then please use star-6.
22 When you are ready to speak, then please use
23 the same star-6 to unmute your line. But we do
24 ask respectfully that you mute your phone until
25 you are ready to speak. It's important for all

1 phone participants to do so.

2 Also, if you must leave the line, please do not
3 put us on hold but rather hang up and dial back
4 in. Please do not put us on hold. Thank you.

5 Ms. Munn?

6 **MS. MUNN:** As we identified additional issues
7 that were of concern, we made every effort to
8 try to address them in a technical manner. In
9 January I brought this very briefly to the
10 Board's attention. I had hoped at that time
11 that we would be able to have the Board address
12 it. But that attempt was not successful.

13 There were two additional actions that were
14 brought at that time. Jim Melius had concerns
15 about the quality of the data, and indicated
16 that Mark Griffon also continued to have
17 concerns with respect to the radon that was
18 involved on this particular site. So we went
19 back to the workgroup and undertook to address
20 those items again and in greater detail.

21 We had a workgroup meeting earlier this week
22 with the hope that we could cover all of the
23 materials that were of concern to those two
24 issues, because in the workgroup that we had
25 had subsequent to the January meeting, we went

1 in with two issues and came out with five. We
2 had addressed those off-line during the interim
3 and had responses, we thought, to most of it as
4 we came into this meeting. At this meeting we
5 only had four of our five workgroup members
6 present; Jim Melius was not here. Fortunately,
7 Mark Griffon had joined us as a non-participant
8 in the workgroup to help address the issues
9 that he had with respect to radon so that those
10 could be discussed with the technical people
11 who were present at the workgroup meeting.
12 We were not very successful in getting to where
13 the chair had hoped we would be. We had the
14 SC&A review before us. We had the NIOSH SEC
15 report and we had the site profile, all of
16 which we were attempting to address. At the
17 close of our meeting -- which we actually had
18 to split into two different segments because of
19 some concerns with respect to the ventilation
20 of the building in question; we were
21 specifically zeroed in on Building 40 at that
22 time -- I asked three questions of the
23 workgroup, which were the focus of the work we
24 were expected to do.
25 The questions that I asked first were that SC&A

1 has identified seven findings of significance
2 in their review of this site. Following
3 detailed technical investigation and
4 interaction with experts and workers, they
5 report all issues resolved. Do you accept this
6 report?

7 I asked for an individual vote from each of the
8 workgroup members, yes or no. I had four yeses
9 with respect to accepting the report of SC&A
10 regarding those seven findings.

11 The next question I asked was: NIOSH has
12 sought information in depth for all activities
13 on this site and has reported they have
14 adequate data to reconstruct or bound radiation
15 dose for Blockson workers. Do you accept this
16 report?

17 The response was two of our members voted yes;
18 two of our members voted no.

19 The third question I asked was: The site
20 profile has been completely rewritten, reviewed
21 and revised at length. Do you accept the
22 current site profile?

23 Two members voted yes; two members voted no.
24 Mr. Griffon had additional information that he
25 wanted to address. I requested that he not

1 attempt to address it at this workgroup
2 meeting; that instead he wait until this
3 current meeting today and address it as a full
4 Board member, as I would expect anyone else who
5 had not been privy to our workgroup sessions.
6 Because it seems unlikely that additional
7 information can be brought to bear, because we
8 have made every effort to interview the workers
9 and outside experts with respect to this
10 process and what had transpired there -- you
11 recall this is a phosphate plant.
12 It is the -- the chair is taking as her
13 prerogative to bring to you today the question
14 which the full Board is going to need to
15 resolve, one way or another. You've seen the
16 three questions that have been asked. My
17 recommendation would have been that we accept
18 the NIOSH position, because adequate data
19 exists to reasonably bound with sufficient
20 accuracy any radiation exposure which should
21 have resulted from employment at Blockson
22 Chemical Company during its contract period as
23 an Atomic Weapons Employer. I bring this to
24 you with your full knowledge that the workgroup
25 is divided on this issue, but it needs to be

1 brought to the Board. I would like to make
2 this in the form of a motion so that it can be
3 open for debate and that we can bring a
4 recommendation to the Secretary, if at all
5 possible.

6 That's all I have.

7 **DR. ZIEMER:** Okay, would you state your motion
8 again then?

9 **MS. MUNN:** My motion is that we accept the
10 NIOSH position that adequate data exists to
11 reasonably bound with sufficient accuracy any
12 radiation exposure which could have resulted
13 from employment at Blockson Chemical Company
14 during its contract period as an Atomic Weapons
15 Employer, and therefore that the SEC that is
16 before us be denied.

17 **DR. ROESSLER:** I second it.

18 **DR. ZIEMER:** Since this is not a recommendation
19 of the workgroup but rather is your own motion,
20 that --

21 **MS. MUNN:** That's correct.

22 **DR. ZIEMER:** -- does require the second; it has
23 been seconded.

24 Now before we have discussion I want to allow
25 the petitioner a chance to make comments.

1 Now who's on the line?

2 **DR. BRANCHE:** She said her name when you asked
3 -- Kathy --

4 **MS. PINCHETTI:** I have nothing.

5 **DR. ZIEMER:** Kathleen, are you on the line?

6 **MS. PINCHETTI:** I'm on the line.

7 **DR. ZIEMER:** Yes, do you have some comments for
8 us at this point?

9 **MS. PINCHETTI:** No, I think I've -- I've said
10 everything I needed to say.

11 **DR. ZIEMER:** Okay, thank you very much,
12 Kathleen.

13 Okay, this motion is open for discussion. Any
14 -- anyone wish to speak for or against the
15 motion? Or are you ready to vote? The -- the
16 motion is basically to accept the NIOSH report
17 that they can do dose reconstruction, and to so
18 report. This would be a -- would be so
19 reported to the Secretary.

20 No discussion --

21 **MR. GRIFFON:** I...

22 **DR. ZIEMER:** Mark?

23 **MR. GRIFFON:** You know. I -- I did want to
24 discuss some of the -- the technical details
25 yesterday in the workgroup level, but that's

1 fine. It's -- it's fine to discuss it here.
2 I'm -- I'm going to have to vote -- I'm going
3 to have to speak against the motion right now,
4 and I -- I -- I say that -- I -- I sort of have
5 some -- some problems with that myself because
6 I think we're getting close and I'm getting
7 close on the radon thing. This radon model --
8 or this radon -- some more assessment on the
9 radon issue was brought to bear -- you know, I
10 received this pretty technical analysis of the
11 radon issue based on source term data and
12 stuff, and variations and (unintelligible). I
13 mean we looked at some of the stuff, but it was
14 all brought to us, you know, yesterday or
15 whatever -- I'm mixing up the days now, but we
16 received it at this Board meeting and -- and
17 some of it depends on -- there's a 1983
18 Blockson survey. It's a 3-page memo re-- you
19 know, when you start to peel the layers away a
20 little bit is where I have some concerns, so
21 you look at a 1983 study. It was a -- a memo.
22 There's no real -- there -- there's some
23 assumptions on how the individual went from
24 counts to working level. There's one working
25 level reported. We ratioed (sic) them to get

1 the other working levels; that part's fine.
2 But I just wonder if -- you know, the -- the
3 pedigree on that -- that study is suspect.
4 That's one -- that's one part of it for me.
5 The other part is if I look at the source term
6 information and -- and I have several questions
7 on the -- on the -- the picocuries per liter of
8 radon that could be in the air in this --
9 particularly in the work spaces where they --
10 where they would likely have been working, and
11 there's some assumptions in the model that I --
12 I have some questions on. Now at the end of
13 the discussion, you know, people were telling
14 me well, this mod-- and -- and even further
15 than that, the -- this SC&A draft that was
16 given to me, the -- there's a first -- you
17 know, you walk through the report and there's
18 some numbers that I can't even corroborate. I
19 -- I used their on-line tool that they've --
20 gave me access again yesterday, and there's
21 some numbers that I can't corroborate and, you
22 know, I'm being told well, forget about all
23 that; really you want to see if it's a factor
24 of five different than this '83 survey and if
25 it -- if it isn't, if the ventilation can't

1 affect it by that much, our approach is still
2 bounding. Well, then you go back to this '83
3 survey and I say boy, this memo report where
4 the guy doesn't even describe his method and
5 has some concluding remark about a working
6 level, that's what I'm hanging my hat on, so
7 I'm a little bit -- you know, I know we've been
8 at this a long time, and I'm not even on the
9 working group and I've been at it a long time,
10 but I -- I feel like, you know, to -- to not
11 take this to the end -- I also think I -- I
12 have just -- you know, have had discussions
13 with the contractor and they're -- SC&A and
14 they're -- they're telling me that well, you
15 know, reasonably, even if we use this and --
16 this or this approach, you know, the highest
17 value we're probably going to get is 20, 25
18 picocuries per liter. Right now the 95th
19 percentile is at 2.3, so that -- that's
20 different, you know, and -- that's quite a bit
21 different in my eyes, and that's not on the
22 table. So I -- I just feel like, you know, why
23 this -- this -- over a very -- a pretty
24 technical issue, why this -- this -- you know,
25 I -- I think I'm cl-- I think we're close and I

1 would rather see it resolved than just to --
2 you know, I guess that's all I have to say. I
3 would rather see that part resolved.

4 The other part is that I, in part, presented I
5 think what were some of Jim Melius's issues,
6 but I don't think I presented exactly what he
7 had asked about at the last workgroup level, so
8 I'm not sure we've really answered his
9 questions. I know he's not here. I know --
10 you know, but --

11 **MS. MUNN:** Well, I do have to object to --

12 **MR. GRIFFON:** Yeah.

13 **MS. MUNN:** -- one thing. Almost immediately
14 following our -- our preceding workgroup, I
15 sent out an e-mail to everyone involved with
16 the identification of my interpretation of what
17 the questions were that were raised. When I
18 said we went in with two questions, we came out
19 with five. I sent a brief resume of what those
20 were and asked anyone who had any interest in
21 these particular items to please be working on
22 them. So we made every effort to do that and I
23 believe that all of the people who were
24 involved received that message. A great deal
25 of work was done in the interim.

1 It is true that we did -- obviously I failed to
2 incorporate you in the discussion that we had
3 with the workers in the interim. We did have
4 three different workers that we talked with who
5 were very helpful with respect to the layout of
6 the building and to the process and what the
7 atmosphere was in the building, all of which
8 fed into the report that we gave. But we made
9 every effort to cover and to establish that
10 these were the questions we were going to
11 attempt to answer.

12 If those were not the -- correct, if those were
13 not the correct questions, then we certainly
14 should have been notified, well in advance of
15 this immediately-preceding workgroup meeting,
16 that those questions were not properly couched.

17 **MR. GRIFFON:** Yeah, I -- I -- and I -- I don't
18 know that they weren't properly couched, Wanda.
19 I'm just saying that -- that a couple of those
20 I think were Jim's issues and -- I know he
21 wasn't here, but -- you know, he wasn't here to
22 discuss them, either, so that was all I was
23 saying.

24 **MS. MUNN:** That's true. We did -- however, he
25 sent me an e-mail with two questions that he

1 had on it. I read those questions to the
2 workgroup at our meeting and they were
3 discussed there.

4 **MR. GRIFFON:** That's true.

5 **DR. ZIEMER:** Jim Lockey?

6 **DR. LOCKEY:** The bounding for the radon, I hear
7 two and I hear 20. Has that been resolved?

8 **MS. MUNN:** Please, John, Jim, either of you --

9 **DR. ZIEMER:** John Mauro?

10 **MS. MUNN:** -- would you address that?

11 **DR. MAURO:** Yes. The discussions we had had to
12 do with modeling the ventilation. There was
13 some technical debate amongst the SC&A
14 personnel at the first meeting. We had an
15 opportunity to work through it, and we came
16 down -- unanimous agreement, yes, the model is
17 valid. And if you use the bound-- most
18 (unintelligible), the model holds.

19 Now the question becomes what input parameters
20 do you use for the model, and the -- and there
21 are a range of plausible values one could use.
22 If you select those input values that would
23 drive the numbers to the highest plausible
24 value, you come in with numbers around 20
25 picocuries per liter. If you move in the other

1 direction, you get much closer to the two
2 picocuries per liter.

3 So the way we see it is, that -- that's a -- in
4 effect, the way we -- way we came out is well,
5 we have three pieces of information. We have
6 the Florida information on what the radon
7 levels were in Florida. We have these
8 measurements, which have certain weaknesses to
9 them, as a surrogate. We have certain
10 information in the 1983 measurements that have
11 certain weaknesses with them, and in fact, one
12 of the reasons we went with the model approach
13 -- we says well, how do we come at this? So we
14 did develop a model, which SC&A stands behind
15 unambiguously, and that model, depending on -- on
16 what range of plausible input parameters you
17 put in, can give you radon concentrations --
18 average radon concentrations in the building
19 which could be as high as 20, but certainly
20 could be two, also.

21 We also discussed the fact that -- and it was
22 an important point brought up by Mark -- that
23 well, listen, you know, the radon
24 concentrations are not going to be uniform
25 throughout the building, and -- because even

1 though you come up -- let's say you say 20 is
2 an upper bound, but there could be locations
3 within the building where it's higher and some
4 locations where it's lower, just because of the
5 way in which the -- the ventilation system
6 works. You don't get instantaneous uniform
7 mixing. So one of the questions then -- I
8 don't know if you recall -- that I posed to one
9 of the folks we interviewed --

10 **MS. MUNN:** One of the workers --

11 **DR. MAURO:** -- the workers --

12 **MS. MUNN:** -- actually two of them.

13 **DR. MAURO:** -- and I deliberately, 'cause I
14 realized this could be important, is were there
15 workers working in the same location all the
16 time. And he said there were -- his exact
17 answer was -- exactly as I recall, there were
18 about six to 10 workers in the building at any
19 given time, and they generally were in
20 different locations at different times. So --

21 **MS. MUNN:** And this jives with information that
22 we had from the workers in -- in the Blockson
23 group meetings that we had there --

24 **DR. MAURO:** Right, so --

25 **MS. MUNN:** -- as well. They indicated that a

1 shift in that building was --

2 **DR. MAURO:** Right.

3 **MS. MUNN:** -- usually six people, sometimes --

4 **DR. MAURO:** Right.

5 **MS. MUNN:** -- as many as eight or nine.

6 **DR. MAURO:** So -- so when I hear that -- and we
7 -- again, SC&A's -- yeah, when you hear that,
8 that means okay, perhaps there is going to be
9 some kind of gradient within the building by
10 elevation, and maybe laterally. If the per--
11 if people are more or less walking around,
12 they're really going to experience, over the
13 course of a year, something closer to the
14 average than -- than let's say what might be
15 the high end. So we come away with the sense
16 that we -- we really can't nail down the exact
17 right number, but -- but some number someplace
18 between two and 20 seems to put the problem in
19 a box as being pic-- the average picocuries per
20 liter of radon that these workers might have
21 experienced, and that's where SC&A comes in,
22 and that's the level of precision that we're
23 operating at.

24 **MS. MUNN:** Thank you, John. Jim, would --

25 **MR. GRIFFON:** Again, can I just --

1 **MS. MUNN:** -- would you --

2 **MR. GRIFFON:** -- can I just --

3 **MS. MUNN:** Yes.

4 **MR. GRIFFON:** -- say one thing to -- to --

5 **MS. MUNN:** Certainly.

6 **MR. GRIFFON:** -- Dr. Lockey's first question?

7 The model does not vary dependent on -- the
8 model that we're considering on the Board does
9 not vary depending on input parameters. It's a
10 -- it's a distribution, so we're back to -- you
11 know, we're back to Florida data in a
12 distribution, with a 95th at 2.33 or something
13 like that. We use these other things -- I
14 agree with John, but we use the other models,
15 and these are models based on through-put and
16 building consideration, ventilation
17 considerations, sort of as reality checks.

18 **DR. NETON:** Right.

19 **MR. GRIFFON:** And you know, we're -- that's
20 where I'm hung up is that I'm concerned that my
21 reality checks are not -- you know, and I --
22 and I will admit that I'm -- that I'm, you know
23 -- I th-- I thought we were getting close to
24 there, but when I don't get numbers to add up,
25 when I don't -- and when I had questions about

1 the '83 survey yesterday, you know, there was
2 no time to get answers for -- I asked Chick
3 Phillips on the side, and he was actually
4 heading to the airport so the-- you know, there
5 was just -- but when I saw that report, I -- I
6 don't even see a method described in that
7 report, and he's telling me it's a Kusnetz
8 count technique, which given the table, it
9 seems plausible that that's what they did. But
10 again, there's no equations and there's --
11 there's no -- nothing to show how they
12 calculated from counts per five minutes to
13 working level, and it's -- it's a 3-page memo
14 report. And you know, that, along with the --
15 this model that I was literally trying to run
16 whi-- during the meeting yesterday and -- and
17 look at the parameters and, you know, I have
18 concerns about the -- the -- some of the
19 baseline assumptions that SC&A offered when
20 they ran that model and whether they are -- at
21 least, you know, if I'm going to do something
22 like that, there's so many variables in that --
23 in that size building, I would think you'd want
24 to pick a conservative assumption on the
25 building volume and things like that, and --

1 and I'm -- I have a difference of opinion there
2 I think than maybe some others, but there's
3 where I -- I come down on it and I just wanted
4 a little -- you know, I wanted to go through
5 that and -- and come to grips with that before
6 I had to vote on it.

7 **MS. MUNN:** Chick Phillips and Tom Tomes worked
8 together at considerable length to produce that
9 paper. Jim?

10 **DR. NETON:** I guess I come at this somewhat
11 differently, although I come out with the same
12 conclusion that SC&A has, in that originally we
13 -- we had the 1983 data and that -- those data
14 were low, and -- and Mark expressed some
15 concerns that they were low, they were down
16 around tenths of picocuries per liter, I
17 believe, and -- and Mark said well, geez, it
18 would be nice to validate that somehow with --
19 with a source term model or something of that
20 effect.

21 So fortunately we have good source term
22 information here. We have the through-put of
23 ore through the building. We know the
24 concentration of radium in the ore, which is
25 very low. One hundredth of one percent of that

1 ore is uranium, so it's a very, very low
2 concentration. In my mind, that -- that
3 indicates numbers should be low. We have the
4 phosphate industry data which indicated it was
5 very low. So SC&A developed this source term
6 model. And in my mind, the way to look at this
7 is -- given that model, with reasonable input
8 terms into that model -- does that come into
9 agreement with the data that we have in the
10 measurements from 1983; and the answer is yes.
11 You would have to put some values out of the
12 norm to get -- well, if you -- you know, we
13 didn't have to put values outside of what we
14 believe to be normal operating conditions to
15 match the values that were measured in the
16 plant. I think that's an important point. You
17 can -- you can get any number you want with
18 this source term model because a lot of it
19 depends, as Mark said, on the input parameters.
20 But given the values that we have measured in
21 1983, using reasonable values for the models,
22 they match. And I think that, to some extent,
23 helps validate that the numbers are going to be
24 low.
25 We believe two picocuries per liter is a

1 bounding value. However, certainly it's open
2 for discussion. But I certainly believe we
3 could bound -- it can be bound, given the
4 source term and the other information that we
5 have. And that's, I think, the relevant issue
6 for a Special Exposure Cohort determination.

7 **DR. ZIEMER:** Jim?

8 **DR. LOCKEY:** John, go -- run through how you
9 did this and why you think it's claimant
10 favorable, would you?

11 **DR. MAURO:** It's -- the model -- do it by hand.
12 For instance, it's not a complicated model, sit
13 there right now and do it. It's a box model --
14 this room. Here's the room. Let's make
15 believe this is Blockson. It's probably about
16 the height and perhaps twice the size. Okay?
17 You got -- we know how many tons per day of ore
18 is coming in that door.

19 **DR. LOCKEY:** What's the present--

20 **DR. MAURO:** Pardon me?

21 **DR. LOCKEY:** What would -- is this the
22 equivalent to phosphate? Is that what you're -

23 -

24 **DR. MAURO:** Yeah, phosphate rock.

25 **DR. LOCKEY:** Okay.

1 **DR. MAURO:** Phosphate rock comes in. It's put
2 in a big silo, and then it's brought in the
3 door. Okay? I mean this is concep-- it's very
4 conceptual.
5 Now trapped inside that rock is the radon.
6 Okay? It's brought in, it goes into the -- one
7 end of the building is a grinder. It
8 pulverizes, grinds the rock to a powder. At
9 that point we're going to assume that all the
10 radon now comes out of the rock -- okay? -- and
11 becomes airborne, so all these atoms -- so for
12 -- you know, all the tons are coming in. We
13 know -- we -- we know the -- we know the -- the
14 composition of the ore, how much uranium is in
15 there. That means we know how much radium is
16 there. We know how much radon is in there. We
17 so know the number of atoms per second coming
18 into this building. We're going to put all
19 those atoms per second in the air. Okay? So
20 it's entering the air, continuously. Okay?
21 Now what -- it's a simple box model that we use
22 all the time, and you're saying all right, we
23 know the input. Okay? Well, we need two other
24 pieces of information: The volume of the room
25 and the air turnover rate. Okay? Now the

1 volume of the room is uncertain, but we did get
2 some feedback that it's a two-story building, a
3 little -- a little bit smaller than a football
4 field, so it's a pretty big building. There's
5 uncertainty there.

6 Also the radon coming in, we're saying well,
7 we're going to put all those atoms in the air
8 as they come in. Well, we know that -- there's
9 a lot of literature on what's called the
10 emanation coefficient. That is, when -- when
11 the radium atom that's trapped in the particle,
12 whatever the particle is, whether it's soil or
13 -- the -- as soon as it decays, it turns from
14 radium into radon. Not all of it leaves the
15 soil matrix. It's sort -- the radi-- some of
16 the radon is -- stays trapped inside this
17 little particle and decays away and stays there
18 and never becomes airborne. And the -- you
19 look into the literature and that radon
20 emanation coefficient -- a typical number, for
21 example, for soil is about 30 percent, so only
22 30 percent actually leaves the particle and is
23 available to become airborne. But we said
24 well, you know, we don't really know what the
25 radon emanation coefficient might be for this,

1 and given that they're deliberately pulverizing
2 this thing and grinding it down to a powder --
3 'cause that's the form you need it to get into
4 in order to digest it and get your -- get your
5 phosphate -- let's go with 100 percent, so it
6 can't be more than that.

7 So we're putting this in the air. All right?
8 Now -- so we've got the volume of the building,
9 more or less. We're using a bounding
10 assumption regarding the rate at which the
11 radon's going into this box, so you don't have
12 -- you don't need this computer program, just
13 do it by hand; it's I over λ , it's -- you
14 know, it's equilibrium.

15 Now, what happens then is -- all right, we've
16 got one more parameter, and this is the one
17 that really troubled us, we didn't know -- is
18 the air turnover rate, 'cause what is the air
19 turnover rate? You know, turnover per hour.

20 When we first did it, and I was on the phone
21 with Chick and Tom, I said listen, as a first
22 cut, I could tell you that, from my experience
23 in building air turnover rates, even a building
24 without any ventilation, just a natural
25 breathing -- you know, one air turnover per

1 hour. Let's just see what happens if we run
2 that number.

3 So we ran it, and at tha-- under those
4 circumstances and we said okay, so we're coming
5 in with these assumptions on the order of about
6 20 -- that's where the 20 comes. I call up --
7 and I said listen, this thing hangs on this air
8 turnover rate, and -- and if we're wrong on
9 that by an order of magnitude, we're off the
10 charts, throw it away.

11 So I instituted two steps. I said -- I asked
12 one of our engineers to go into the literature
13 on building ventilation -- old, large,
14 industrial building ventilations. I didn't
15 think he'd come back with anything, so I said
16 go see what you can find on air turnover rates.
17 So he runs off and does that.

18 Meanwhile I pick up -- I call Mort Lipman, my
19 industrial hygiene professor at NYU, got him on
20 the phone at NYU. And I said Mort -- he
21 remembered me, remembered Jim, we both had him
22 as a professor. I said listen, I've got a
23 problem. I said -- I told him -- I told him my
24 story, and I said I used one air turnover per
25 hour. He goes it's much bigger than that.

1 It's got to be bigger than that. My experience
2 is, that would place an upper bound, what -- in
3 -- I said would you mind if I say this to the
4 Board in public? He says absolutely.

5 So meanwhile, the other fella, [Identifying
6 Information Redacted], who's looking into this,
7 he comes back with a report -- on line, you
8 could download it. There it is, a table of
9 different vintage buildings of different --
10 fundamentally different designs. The simplest
11 and the worst design for a industrial building
12 is the way they designed the Blockson building
13 -- fans in the ceiling exhausting right at the
14 ceiling without -- you know, not collection.
15 Fans in the ceiling going out and air coming in
16 through windows, either opened or closed. If
17 they're closed, it's less; if it's open, it's -
18 - you know, so you're sucking this -- so you --
19 basically, air's coming in through the -- the
20 walls where the windows are and going up and
21 out.

22 The numbers that are in the report, two to four
23 air turnovers per hour is the -- is the kind of
24 numbers. So when I do this kind of work, I say
25 okay, we got two to four out of the literature.

1 We got Mort Lipman, who I trust as be-- you
2 know, from experience, says about one. My
3 personal experience on air turnover in
4 buildings for radon problems or private
5 residences, one. So I said listen, let's --
6 let's -- to -- to put this problem in a box,
7 and this is how I come at everything, almost
8 like a common sense thing, what have we got?
9 Well, if you go with the 100 percent radon
10 emanation, you go with a building size of about
11 the size of a football field two stories high,
12 and you go with one air turnover per hour, you
13 get the -- you get the high end number around
14 20.
15 Now built into that, of course, the air
16 turnover rate may very well have been closer to
17 two to three. The radon emanation coefficient
18 may very well have been closer to 30 percent.
19 So right off the bat, you know, we get about a
20 six-fold effect there. You know, the size of
21 the building, we might have been off by 30, 40
22 percent, you know, so -- but that -- see, to
23 me, now it becomes marginal. We -- you know,
24 wouldn't -- now we're wor-- we're worried about
25 orders of magnitude right now, factors of two

1 or three, not 20 percent, so this -- it -- it
2 sounds so crude, but these kinds of problems
3 you have to come at that way and say --
4 And then you say okay, this is one way to come
5 at it. And this is -- by the way, this
6 approach is very consistent with the four-step
7 approach for surrogate data because what really
8 is happening here, remember, is we're using
9 data from Florida that's ha-- that's -- has
10 problems with it. In other words, it was
11 collected in Florida in -- under their
12 conditions, and the buildings that were there
13 seem to be more or less open, where this
14 building is closed. So you know, say hmm, it's
15 got some weaknesses there. Then we're saying
16 okay -- oh, no, but what about the da-- we have
17 some measurements made in 1983. I asked Mort,
18 I said by the way, if I had some radon
19 measurements in '83 for the same process, would
20 you think those radon measurements would be --
21 given the same process -- applicable to an
22 earlier building? 'Cause you know, a lot had
23 happened between the '50s and the '80s in
24 improving ventilation design, whether or not
25 there were upgrades made. But there are

1 reasons to believe that maybe the numbers in
2 '83 may have been -- well, perhaps higher or
3 lower. Higher because the through-- apparently
4 the through-put went up as time went on, they
5 saw the process more. Okay? But apparently
6 there was some ventilation system upgrades that
7 went along with that.

8 So there -- so in other words -- so you got --
9 so in effect what we have is three different
10 sources of information, and I think that is --
11 we got some measurements in '83 in Blockson.
12 We got some measurements in Florida. And now
13 we got this model.

14 The thing that brings me to where I am now is
15 that I think we put the problem in a box. In
16 other words, in the end I'd like to get to a
17 point where I said I think I've got my arms
18 around it. It's someplace -- yeah, it's less
19 than 20. Is it two? Maybe not. Maybe two is
20 good, maybe it's not good. But I could tell
21 you that I -- right now I would say -- but we
22 know it's le-- twe-- less than 20, you know.
23 So that's the level of precision that we bring
24 to the table and why SC&A is coming out where
25 it's coming out. Where -- what the right

1 number is in that distribution -- you know, a
2 lot of judgment there, and some -- and that's
3 where the sensibility consensus has to find
4 itself. But we believe you can put this
5 problem in a box and place a plausible upper
6 bound.

7 **DR. ZIEMER:** Thank you. Yes, Robert?

8 **MR. STEPHAN:** John, can you help us understand,
9 for the benefit of the workers who may be on
10 the phone, particularly [Identifying
11 Information Redacted] (sic) who called in last
12 night I think during the workgroup time, the
13 issue of the air turnover? She was testifying
14 that, having spoken to some of the workers -- I
15 think her father being one of them -- that
16 during the wintertime the vents were closed at
17 the top of the building. So can you, you know,
18 explain for us how that relates to your air
19 torn-- turnover model?

20 **DR. MAURO:** A good way to think about it is one
21 of the problems people have in their homes when
22 you go in -- if you go into a radon test -- I
23 do a lot of radon -- you go to a home, you do
24 it on closed house conditions in the winter.
25 You get the radon -- you get your detector, you

1 put it in the basement, you close up your house
2 and -- and it's the wintertime, and it's under
3 those circumstances that you have -- you have
4 created a circumstance that will give you the
5 highest levels of radon because you're
6 minimizing the air turnover and -- because
7 you've closed all the windows. And under those
8 circumstances is when -- they do it on purpose,
9 and that's when you get your about one air
10 turnover per hour, you know. So what I'm
11 saying is the one air turnover per hour is the
12 natural breathing rate of a building when you
13 really don't deliberately try to ventilate it.
14 And so yes, when you close those windows in the
15 winter -- and they did do that, they closed the
16 windows -- that's going to reduce the air
17 turnover rate. You open the windows, you get a
18 little better turnover. But you know -- so
19 that's why -- you know, as best I can, I -- I
20 picked out one, you know, but --

21 **DR. ZIEMER:** Your one value is your worst-case
22 value.

23 **DR. MAURO:** Yeah, I consider that to be your
24 worst-case situation, yeah. That's it.

25 **DR. ZIEMER:** Robert?

1 **MR. STEPHAN:** And before you vote, for the
2 benefit of the workers, can you explain the --
3 the input scenario you were discussing was the
4 ore coming in being crushed, and then the
5 workers would have a question about all of the
6 yellowcake that was being hauled around in the
7 barrels at different points in time, so just --
8 just discuss for us your -- your thoughts and
9 maybe NIOSH's thoughts on how that relates to
10 the scenario you just discussed. Thank you.

11 **DR. MAURO:** We're talking about Building 40 --

12 **MS. MUNN:** A single building.

13 **DR. MAURO:** -- where the rad-- not -- not
14 Building 55. Think of it like this. All of
15 the radium and the radon, its -- its problem is
16 in Building 40. One -- once -- once that phos-
17 - the -- the liquor is produced, what -- you're
18 at the point now where the -- the radium is not
19 in there anymore, so the -- what's going off
20 with Building 55 is this monosodium phosphate
21 liquor that has the radium and has the thorium
22 and doesn't have the ra-- did I say radium?
23 I'm sorry -- it has the uranium and the
24 thorium. The radium, which is the source of
25 the radon, that's left behind in Building 40.

1 It's -- and/or the stacks, the phosphogypsum
2 stacks. So Buil-- so Building 55 -- you're not
3 going to expect to see very much radon there.
4 You're going to get uranium and you're going to
5 ha-- that's -- that's going to be your problem.
6 But the radon problem is not in Building 55.
7 The radi-- the ura-- the uranium issue is
8 Building 55, but you certainly have the
9 potential for a radon problem in Building 40,
10 so -- so that's why they separate.

11 **MR. STEPHAN:** Thank you.

12 **DR. ZIEMER:** Other comments, Board members?

13 **MS. MUNN:** I just need to point out to the
14 Board that this is one of the few instances we
15 have seen where both the agency and our
16 contractor agree that this is not an
17 intractable situation, that it can be bounded.
18 In many cases it can be accurately assessed for
19 an individual. At the very least, it can be
20 bounded and well-bounded. It's rare that we
21 get that kind of agreement from the experts
22 both in NIOSH and in SC&A.

23 **DR. ZIEMER:** Thank you. Jim, another comment?

24 **DR. LOCKEY:** John, I appreciate your comments.
25 My concern, as I -- I think the -- the Board is

1 concerned, is that we -- we have to make sure
2 that we're claimant favorable. And it sounds
3 like one exchange is a -- at a level of 20
4 picocuries, that that's what every -- is said
5 is a -- is a claimant-favorable position to
6 take on this upper bounding. Based on the
7 award rate for cancer in this program, which is
8 about 34 percent, when you compare that to the
9 British results -- which is about ten percent -
10 - and you compare that to the medical
11 literature in relationship to cancer mortality
12 in uranium workers, I think we are very
13 claimant favorable and that's the proper
14 approach and we should always continue to do
15 that. And I think -- that's why I was
16 concerned is that you -- you sort of took the
17 worst-case situation for that building, and --
18 and -- and they can be bound. Thank you.

19 **MR. GRIFFON:** But -- but again, I -- and Jim'll
20 probably speak to this, too, but that's --
21 that's not the model before us, you know, so --
22 the 20 is not on the table as far as --

23 **DR. NETON:** Well --

24 **MR. GRIFFON:** -- this decision.

25 **DR. NETON:** I think it's -- it's not on the

1 table currently, but again, that could become a
2 site profile issue. I mean we've done this in
3 the past where if there's disagreement between
4 NIOSH and SC&A as to what the exact value is,
5 yet we both believe that it's a tractable
6 problem, then we can come to some consensus
7 eventually. And I think that's where we're at
8 with this.

9 Speaking to the cancer -- lung cancer issue, I
10 would point out, and this is interesting, in
11 the Blockson case that the concentration of
12 radon that's assigned to the workers at
13 Blockson Chemical will have very little bearing
14 on the compensability of any cancers at
15 Blockson. That's because the uranium
16 inhalation model that we've developed for the
17 workers -- that everyone gets assigned, whether
18 they worked in Building 55 or not -- creates an
19 extremely high compensability rate for lung
20 cancers to start with.

21 In other words, if you have lung cancer and
22 worked any appreciable extent of time at
23 Blockson Chemical, you're very likely to be
24 compensated under this program, purely from the
25 uranium exposure. So whether radon is two or

1 20, in my opinion it will make an extremely
2 small difference in the compensability. It's
3 not really a consideration, but just an
4 interesting site fact.

5 **DR. ZIEMER:** Other comments, pro or con?
6 Anyone wish to speak against the motion, or for
7 the motion?

8 **MR. GRIFFON:** I -- I mean I think -- I don't
9 disagree with Jim's last point, but as he said
10 at the end, it's irrelevant. I mean this is a
11 Special Exposure Cohort, so we're not looking
12 at disease cohorts here, so -- but -- but it is
13 what sort of drives me to want to close this
14 radon issue out because, you know -- just
15 because of what he stated. I mean it's -- it's
16 a lung cancer issue only and -- and I -- and I
17 -- just one word to what Wanda said. I mean I
18 know we have agreement with the contractor and
19 NIOSH, but I think you said yesterday -- you
20 know, we have to keep in mind that SC&A is our
21 contractor and we -- we are doing the review.
22 The Board is tasked -- or, you know, authorized
23 under the legislation to do this. And you
24 know, I just think that to get this model --
25 again, I'm not getting the numbers. We hear

1 statements made on -- on the mike here that we
2 can bound it with 20, but it's not on the
3 table. The '83 study -- you know, I -- maybe I
4 should have looked at that earlier. I was
5 taking those numbers and -- and looking on the
6 other end and -- and hadn't saw the source
7 documents so I -- my apologies there, but
8 there's a lot of documents to look at. And
9 then you compare -- the only other thing I'll
10 say is I -- I look at '83, this 1983 study,
11 which I -- you know, suspect -- or -- or at
12 least not many details in the -- in the memo
13 report, and compare that to a -- I believe a
14 later survey in Building 55, I -- somebody can
15 correct me if I'm wrong, but there was a buil--
16 a survey in Building 55 and the radon con-- and
17 we just heard how -- from John that the -- 55
18 wasn't an issue as far as radon. Radon levels
19 were slightly higher in that building on the
20 survey than in Building 40 on this 1983 survey.
21 So I guess someone can say well, they're all
22 seven-year background, that's reality, you
23 know. But when I'm -- you know, when I get
24 this -- this last source term model to sort of
25 do a reality check and I have some differences

1 of opinion on -- and I mean I'm not even -- I'm
2 not even saying that it necessarily can be
3 bounded, but I'm saying that I've got these
4 three final factors basically to corroborate
5 the model and -- and I'm not getting numbers
6 that jive with what our contractor or NIOSH
7 have gotten, then -- you know, even this
8 printed report -- I mean I -- you know, John
9 did say -- I mean the -- there's a couple of
10 different sections to this so maybe I -- but
11 the initial parameters that I was running some
12 calculations on show a release fraction of .3.
13 I think he examined different release fractions
14 so that might be what he's talking about with
15 the one, but it -- it didn't always assume 100
16 percent -- you know, he looked at different
17 parameters, which is fine; that's the way I
18 would have done it. But it also shows a
19 production rate, which I had some questions
20 about, that assumes 6,000 pou-- pou-- tons per
21 week, equally distributed, assuming 24-hour
22 operation. And I don't know, was -- if it was
23 24/7 days, if that was necessarily -- averaging
24 over the year, it may not even impact it. But
25 that's a question -- but then when I take these

1 parameters and I run them in -- in this first
2 little -- you know, do the first thing, which
3 is to generate the -- the radon per second, I'm
4 getting different numbers than in this re-- in
5 this report that was handed out to me
6 yesterday. So I'm trying to cor-- you know, I
7 -- I do want to -- to see an end to this, but
8 when I'm not getting numbers to add up and I
9 have questions on parameters, I just feel like
10 I'm not -- I'm not there yet and I -- so that's
11 why I'm speaking against the motion.

12 **DR. ZIEMER:** Okay, any others? Yes, Brad.

13 **UNIDENTIFIED:** Hello?

14 **DR. ZIEMER:** Go ahead, Brad.

15 **MR. CLAWSON:** Okay. One of my things that I
16 look at on this, and I'm looking at this as if
17 I was a individual that was at Blockson or
18 whatever, and I'm sitting there listening to
19 how they've reconstructed my building and so
20 forth like that, and -- and it's a wonderful
21 thing, it's wonderful science. But it's a --
22 what we call in the science also kind of a
23 slag.

24 We -- we are using an awful lot of speculation,
25 and I realize that that's what we have to be

1 able to do. But before we ever put our name
2 onto it, we -- or I need to always feel that I
3 have made this as claimant favorable as
4 possible. I think as if I had a child or a
5 mother or a father that's in this building.
6 And the petitioners have brought up so many
7 times well, these vents were closed, this was
8 that, the information you're using is from a
9 completely different state, the facility was a
10 little bit different. Well, you have a little
11 bit of magic here and a little bit of smoke and
12 mirrors here, you can -- you can come up to a
13 fairly close one. But my thing is is I don't
14 think that we have fully addressed all the
15 issues and really looked at it and made it the
16 -- as claimant favorable as possible because we
17 are using a lot of speculations.

18 **DR. ZIEMER:** Okay, thank you. Jim, another
19 comment?

20 **DR. LOCKEY:** Brad, maybe I can address that.
21 Based on what John has said, he's taking an ore
22 that has very low radon content. He's assuming
23 100 percent release, which you don't get -- you
24 don't get. And he's assuming essentially no
25 air exchange in the building. You can't get

1 any more conservative than that. I mean that -
2 - that probably is over-estimating the
3 exposures by a factor of ten to 20, but it is a
4 very claimant-favorable approach. It really
5 is. I mean it is -- it is, from what I'm
6 hearing anyway, and that's why I was asking the
7 question how -- how did he come up with that
8 model. And if you take a box model with no air
9 exchange --

10 **DR. MAURO:** No, one air exchange.

11 **DR. LOCKEY:** -- one air exchange and an ore
12 where you're -- you're not going to get 100
13 percent radon release unless you grind it into
14 a fine powder, that -- that's a pretty
15 conservative approach.

16 **DR. ZIEMER:** Okay, Gen and then Mike.

17 **DR. ROESSLER:** I think I would question the use
18 of your word "speculation". This really is not
19 speculation. That makes it seem like you're
20 just pulling everything out of the air.
21 They're starting with facts, pretty solid
22 facts, and from that point trying to put
23 together perhaps what you would call a worst-
24 case scenario, so it's not speculation.

25 **DR. ZIEMER:** Okay. Michael?

1 **MR. GIBSON:** Someone correct me if I'm wrong,
2 but the numbers on the report are looking like
3 30 percent of the radon -- if -- if we're going
4 to talk these numbers of -- bounding limit of
5 20, then that's when you're talking about one
6 air turnover per hour and a hundred -- a
7 hundred percent resus-- yeah.

8 **MR. GRIFFON:** Release fraction.

9 **DR. ZIEMER:** John?

10 **DR. MAURO:** If I may try to hel-- it's -- it's
11 -- the report you -- you're seeing, in the
12 first case, was -- okay, let's go with the 30
13 percent because that's sort of conventional,
14 not bad. But at the same time, the re-- so we
15 looked at that and varied some parameters and
16 see what happens when you use that as your --
17 the starting point, the 30 percent radon
18 emanation coefficient. But then we said but
19 wait a minute, you know, we are -- there are --
20 are aggressively -- it's not like we're talking
21 about soil now, soil sitting there. We're
22 going to take this stuff and we're going to
23 grind it and pulverize it and make it into a
24 powder. I don't know what the radon emanation
25 coefficient is for that, so I say let's do

1 another case. Let's go with 100 percent, so
2 this -- and could -- maybe it was, I don't know
3 -- it has a factor -- it's proportional. You
4 know, it -- air turnover -- everything is
5 proportional, so it's -- you know, so you want
6 to -- if you want to go from, you know, 30
7 percent to 100 percent -- well, it's a factor
8 of three. Air turnover rates, if you want to
9 go one air turnover rate -- no, we want to go
10 with two, it's a factor of two. So in other
11 words, it's all multipliers. So you could see
12 -- when we come up with the 20, I -- someone
13 sa-- and that was on one air turnover. If I
14 say no and now I want to go with two, all
15 right, it's ten. Well, wait a minute, I don't
16 want to go -- I want to -- I -- you know, I
17 want to go with 30 percent, divide that by
18 three. Now we're down -- which may be the
19 realistic one, you know. You know where we
20 are? We're right around three, which is the
21 number that -- so you know -- you see how I get
22 -- how I get there.

23 **DR. NETON:** I'd also like to just point out one
24 thing that I remembered, is that the location
25 where SC&A assumes there was a 100 percent

1 release of the radon from the ore in the
2 grinding operation, we've interviewed a number
3 of people and everyone we've interviewed that's
4 talked about it has indicated that there was
5 local exhaust ventilation directly over the
6 grinding operation because it was kind of a
7 dusty operation. So that in itself had its own
8 capture velocity to ventilate the radon out of
9 the building itself. So that -- that would
10 even make the model slightly more conservative
11 than it really is.

12 **DR. ZIEMER:** Michael, another comment?

13 **MR. GIBSON:** Let me restate my question. The
14 numbers that are on the table that we're going
15 to be considering, or that we are considering,
16 is two, not 20. Is that correct?

17 **DR. NETON:** That's currently what is in our
18 site profile.

19 **MR. GIBSON:** Okay.

20 **DR. NETON:** But again, this is an SEC
21 evaluation and the determination is whether or
22 not it could be adequately bounded.

23 **DR. ZIEMER:** Robert?

24 **MR. STEPHAN:** John, can you just submit
25 something for the record -- a source, you know,

1 some piece of literature; I'm sure you have
2 plenty -- that relates to the one turnover per
3 hour? You know, af-- after the fact.

4 **DR. MAURO:** Yes, I can. I have --

5 **MS. MUNN:** Thank you.

6 **DR. MAURO:** I brought it with me. It's a page
7 out of a report that's on the web. What --
8 unfortunately, what you have is a handout, this
9 report. That -- first of all, it shouldn't be
10 distributed. It was something that was
11 produced on Friday. We weren't going to hand
12 it out. A request was made by one of the Board
13 members would like to look at it. This was our
14 internal work and it's really --

15 **DR. ZIEMER:** It's not an official SC&A --

16 **DR. MAURO:** It's not an SC-- it's not an
17 official SC&A deliverable. I checked it, what
18 numbers were done, and then I did a hand cal to
19 -- we normally do more than that. It does have
20 the literature behind it. I -- I saw the
21 citation as I -- other words, so -- what I'm
22 getting at is, in effect, you're looking at a
23 work product that is not an official SC&A
24 deliverable. It was produced for the purpose
25 of helping me come to the table with some -- of

1 -- information of value that could be useful to
2 the Board, but it's not -- so what I would like
3 to do, given the weight apparently that this is
4 starting to take, is to turn it into a
5 deliverable that can be put on the web, with
6 all the citations, so that anyone could go in
7 and check the numbers and convince themselves
8 that the values are --

9 **DR. BRANCHE:** That would be appropriate.

10 **DR. MAURO:** -- correct. I think that's -- yeah
11 -- so -- yeah, I think that's very important
12 because really it has not received your -- it
13 has not received official SC&A peer review.
14 The review it got was when Chick finished it,
15 wrote it up -- again, I -- and in fact, I
16 originally started by doing my own hand cal.
17 Then I brought it to Chick's attention. Chick
18 did it a little bit more sophisticated, doing a
19 parametric analysis.

20 **DR. ZIEMER:** Okay. Thank you.

21 **DR. BRANCHE:** Do you want to collect the copies
22 that have been distributed back?

23 **DR. MAURO:** I'd like to do that, yes. Thank
24 you. Thank you.

25 **DR. ZIEMER:** Josie?

1 **MS. BEACH:** I personally would like to see this
2 tabled until the next meeting to give a chance
3 for this new information and some of the other
4 -- the other topics we're discussing this
5 morning time to -- for all of us to understand
6 what the issue is, so...

7 **DR. ZIEMER:** Are you making a motion to table?

8 **MS. BEACH:** I would like to table. I don't
9 know if I can make a motion to do that.

10 **DR. ZIEMER:** Sure, you can make a motion to do
11 that.

12 **MS. BEACH:** Then I would like to make a motion
13 to table this until our next --

14 **MR. SCHOFIELD:** Second.

15 **MS. BEACH:** -- meeting.

16 **DR. ZIEMER:** It's been seconded. This is not a
17 debatable motion. We will immediately vote.
18 It takes a majority to table. We'll take a
19 roll call vote.

20 **DR. BRANCHE:** Roll call vote? This is for the
21 motion to table.

22 Ms. Beach?

23 **MS. BEACH:** Yes.

24 **DR. BRANCHE:** Mr. Clawson?

25 **MR. CLAWSON:** Yes.

1 DR. BRANCHE: Mr. Gibson?

2 MR. GIBSON: Yes.

3 DR. BRANCHE: Mr. Griffon?

4 MR. GRIFFON: Yes.

5 DR. BRANCHE: Dr. Lockey?

6 DR. LOCKEY: No.

7 DR. BRANCHE: We'll have to get Dr. Melius's
8 vote, I guess --

9 DR. ZIEMER: No, you don't.

10 DR. BRANCHE: Not for this one. Ms. Munn?

11 MS. MUNN: No.

12 DR. BRANCHE: Mr. Presley?

13 MR. PRESLEY: No.

14 DR. BRANCHE: Dr. Poston?

15 DR. POSTON: Yes.

16 DR. BRANCHE: Dr. Roessler?

17 DR. ROESSLER: No.

18 DR. BRANCHE: Mr. Schofield?

19 MR. SCHOFIELD: Yes.

20 DR. BRANCHE: Dr. Ziemer?

21 DR. ZIEMER: The Chair votes no. So what --
22 what's the...

23 DR. BRANCHE: I think it's a tie. One second.

24 (Pause)

25 No, it can't be a tie 'cause Dr. Melius is not

1 here.

2 **DR. ZIEMER:** It can't be a tie.

3 (Pause)

4 I think the no -- or the yeses have it.

5 **DR. BRANCHE:** The yes to table have it by one.

6 **DR. ZIEMER:** Okay. The -- the motion to table
7 is successful, and that then ends this
8 discussion.

9 **DR. BRANCHE:** I have a question, though, one --

10 **DR. ZIEMER:** John Poston.

11 **DR. POSTON:** Well, you beat me to it, but I
12 voted in favor of the motion, with the
13 understanding that we were all going to see
14 this report. None of us -- I haven't seen it,
15 so I couldn't make a -- you know, I understand
16 and was certainly inclined to vote to deny the
17 SEC, but I haven't seen the report. I can't
18 make -- you know, I --

19 **DR. ZIEMER:** That's fine.

20 **DR. POSTON:** -- and so I assume that this
21 action that's -- follows this vote is that
22 we're going to see that report.

23 **DR. ZIEMER:** I think the commitment has been to
24 turn the -- the unofficial document into a
25 deliverable, and can we so task him to do that?

1 **DR. BRANCHE:** Yes. My question, Dr. Ziemer, is
2 is this being tabled until the telephone
3 conference call in August, or the face-to-face
4 Board meeting in September?

5 **DR. ZIEMER:** The motion had no date associated
6 with it. It comes off the table when someone
7 moves to remove it from the table.

8 **DR. BRANCHE:** Thank you.

9 **DR. ZIEMER:** That can occur at the next
10 meeting. It can occur a year from now. But I
11 think in principle this is going to have to be
12 like any others, we've got to move forward on
13 this. We cannot keep tabling things
14 indefinitely.

15 Yes, Mark.

16 **MR. GRIFFON:** Can I ask -- just a -- this may
17 be -- just to clarify. This -- this
18 deliverable for SC&A -- I know we've had
19 discussions before on what SC&A's work and
20 tasks should be, and what they are not. And
21 this is a -- a analysis to demonstr-- to sort
22 of confirm the model in the ER report, or to
23 val-- you know, to substantiate, I guess is a
24 better word. I'm not sure it's not -- it
25 shouldn't be a NIOSH work product. It's

1 defending their position of -- and I know that
2 -- that -- I think SC&A and NIOSH, Tom Tomes,
3 sort of collaborated on this, but I'm not sure
4 who should pro-- you know, it might be a small
5 point, but I think it might be important.

6 **DR. ZIEMER:** Well, I think what happened here
7 was a document, which I guess was like tabletop
8 scratchings at the workgroup, took on a life of
9 its own and ended up here. I've not seen the
10 document that's being discussed myself, but it
11 -- it has become a focus of discussion because
12 it apparently helped capture the thought
13 process for how one can approach the radon
14 issue. So in that sense, I think all we're
15 asking John to do is put this in a form that
16 everybody -- I mean the work has been done, so
17 we're asking for a copy of that and the
18 citations and official delivery to the Board
19 through the normal channels.

20 **DR. MAURO:** If you give me a week I'll get it
21 to everyone electronically. We could even get
22 it PA reviewed if it could be -- it's very
23 short.

24 **DR. BRANCHE:** It should be PA reviewed.

25 **DR. MAURO:** It's very short.

1 **MS. MUNN:** It's only two pages and -- and the
2 citations, and it's already in a deliverable
3 form in terms of format. The only thing that
4 is lacking is it was not PA reviewed. It was a
5 late-breaking document.

6 **DR. NETON:** I have a process question. Does
7 this report then be-- is it distributed to the
8 full Board and then it will take up the issue
9 again at the Board meeting, or does this go
10 back to the working group for further
11 deliberations?

12 **MS. MUNN:** That was going to be my question,
13 Jim. I wanted to make very sure that there's
14 no instruction being given to the workgroup.
15 And if there is, what is that instruction, and
16 whether there is any subsequent --

17 **DR. ZIEMER:** Well, it seems to the Chair that
18 this issue has been vetted before the Board now
19 and people are asking to see the -- the
20 underlying document, so certainly this is a
21 Board issue at this point.

22 Now since the tabling has occurred, I -- I
23 recognize that that gives -- Mark, it gives you
24 the opportunity to try to come to closure on
25 some of your issues and that may be something

1 you need to do yourself. Do you need the help
2 of the workgroup on -- on that or is it a
3 matter of --

4 **MR. GRIFFON:** No.

5 **DR. ZIEMER:** -- being able to look at the --
6 the documentation --

7 **MR. GRIFFON:** Yeah, I don't -- I don't -- I
8 don't think so, no -- no.

9 **DR. ZIEMER:** So the Chair would ask, in that
10 case -- and if there are others who have those
11 concerns that Mark articulated, to be sure to
12 work with him, and please seek whatever
13 clarification you need from either NIOSH or
14 SC&A to make sure that -- that we're on the
15 same page there as far as interpreting and
16 collaborating on that data.

17 **DR. BRANCHE:** One additional point of order.
18 You did hear the discussion that Dr. Mauro
19 would like those draft copies back. It is --
20 it requires more than simply returning it. You
21 said it was some scratch notes for your own
22 use, and we really don't need to have that
23 interim document that was distributed to the
24 workgroup members treated as if it were tru-- a
25 true deliverable from SC&A. So if -- if you

1 would please re-- turn those back in to Dr.
2 Mauro or a member of his team, I'd appreciate
3 it. Thank you.

4 **DR. ZIEMER:** So unless the Board believes that
5 there's additional work for the workgroup to
6 do, I -- I believe it's a matter of getting
7 this documentation to the Board members for
8 their perusal. And if that comes in a timely
9 fashion, then I -- I would hope we could do --
10 do the vote at our next meeting, but it would
11 require a vote to remove it from the table, and
12 then action on the original motion, which is
13 the motion to con-- to -- the motion was to
14 support the NIOSH position.

15 **MS. MUNN:** The workgroup chair will be more
16 than happy to take the responsibility to see
17 that it's removed from the table at the next
18 meeting.

19 **DR. ZIEMER:** Thank you.

20 **ROCKY FLATS PLANT, MR. MARK GRIFFON**

21 Next on our agenda is the Rocky Flats plant
22 then. Mark, do you have some items to report
23 to us there?

24 **MR. GRIFFON:** Yeah, the -- the only -- we had a
25 workgroup call. I -- I am at a loss to

1 remember when, it was recently. And really
2 what we had at that workgroup call was a
3 presentation from --

4 **DR. BRANCHE:** The 17th of June.

5 **MR. GRIFFON:** -- 17th of June, thank you. We
6 had a -- a presentation from the Department of
7 Labor on the implementation of the SEC class at
8 -- at Rocky Flats, particularly related to the
9 -- how were neutron workers identified. And at
10 that point -- at the end of the meeting I
11 agreed that I would write a -- a draft memo and
12 run it by the workgroup first, and then bring
13 it back to the Board. I haven't had a chance
14 to do that yet, and I still want to -- I'm
15 actually in the process of collecting more
16 facts on this, quite frankly, before I put a
17 memo together. My -- I had a question to
18 Department of Labor during the meeting and I've
19 talked to Jeff a little bit off line about
20 this, but it -- it appears that -- that the
21 implementation of this -- that the cases that
22 are sort of not being included in the class are
23 -- are ver-- based on the neutron worker
24 criteria, anyway -- if they fit in the years
25 and everything else, based on that criteria

1 alone, it seems like a very limited number of
2 cases. And I guess there's been some
3 discussions about the nature of those
4 particular cases and so -- so I -- I don't want
5 to -- you know, it -- it may be that I need to
6 just get some more of those facts before I put
7 any memo before the Board, you know, 'cause I
8 don't know that we need an action and I want to
9 make sure before we do anything that -- I have
10 all the facts, so...

11 **DR. ZIEMER:** Board members, do you have any
12 questions on this issue with Mark?

13 (No responses)

14 And the petitioners in Rocky Flats are being
15 kept apprised of -- of what's going on there, I
16 assume. I know they were concerned there about
17 how the -- the class was being implemented and
18 so on.

19 **MR. GRIFFON:** Right, and --

20 **DR. ZIEMER:** Right.

21 **MR. GRIFFON:** -- I believe the petitioners have
22 been represented on the workgroup calls, so
23 they've been following the process, yes.

24 **CHAPMAN VALVE, DR. JOHN POSTON**

25 **DR. ZIEMER:** Okay, let's move on to Chapman

1 Valve and Dr. Poston.

2 **DR. POSTON:** Thank you, Mr. Chairman. I -- I
3 bring you sort of the same problem that Ms.
4 Munn presented --

5 **UNIDENTIFIED:** We're on Chapman. Yeah, I
6 picked it up just so I could --

7 **DR. BRANCHE:** If all participants by phone
8 would please mute your line.

9 **MR. GRIFFON:** I think that's Jim Melius.

10 **DR. BRANCHE:** Dr. Melius, is that you?

11 (No responses)

12 **MR. GRIFFON:** No.

13 **DR. BRANCHE:** If all participants participating
14 by phone would please mute your line. If you
15 do not have a mute button, then please use
16 star-6. Also, I ask all phone participants, do
17 not put this line on hold. If you must leave
18 the line, then please hang up and dial back in,
19 but do not put us on hold. It makes for a lot
20 of unnecessary noise on the line, disturbing
21 every-- disrupting everyone's ability to be
22 able to hear. Thank you.

23 **DR. POSTON:** Our most recent face-to-face
24 meeting was May 1st in Cincinnati. At that
25 time we put together some questions that were

1 transmitted to the Department of Energy for
2 answer, and we also asked Dr. Neton to continue
3 with an initiative that he had started in
4 contacting the -- the folks at Oak Ridge
5 National Lab regarding the one sample at
6 Chapman Valve that was slightly elevated -- I
7 believe it was on the order of two percent
8 enriched uranium.

9 We also at that meeting decided that we needed
10 to request removal of the Dean Street facility
11 from our consideration because we were unable
12 to find any information on -- on that facility
13 that would allow us to do anything. And that
14 subsequently was a motion that I -- or a
15 request that I made in our telephone confer--
16 conference call that we had after that May 1st
17 face-to-face meeting.

18 Most recently we met yesterday to discuss these
19 issues. We have a lengthy letter from Mr.
20 Folle* from Oak Ridge National Laboratory
21 regarding the -- the sample. He basically has
22 confirmed that the sample, as far as he can
23 ascertain, was an actual sample of two percent.
24 I don't think I'm mischaracterizing his -- his
25 position that he didn't have an explanation for

1 it, although he did speculate in his letter
2 that there was some Department of Defense work
3 that occurred at Chapman Valve associated with
4 the Nautilus program. No date was assigned,
5 but that was roughly in the -- in the late
6 '50s. The Nautilus went to sea in 1957, as I
7 recall -- '57/'58 -- which is outside of the
8 time frame considered. So -- so we have this
9 one sample which indicates there was some
10 activity going on site at the -- during some
11 undefined period in which there was slightly
12 enriched uranium where --

13 So the response from DOE which we received the
14 day -- the evening before our workgroup meeting
15 basically provided no new information, and so
16 we were left with Mr. Folle's letter confirming
17 the sample and the situation, in which we
18 basically I think never disagreed, that the
19 external dosimetry could be done by NIOSH, but
20 the major contention was the internal
21 dosimetry.

22 So the committee is -- or the workgroup, I'm
23 sorry, is somewhat split. We were able not to
24 -- we were not able to reach an agreement on
25 the internal dose. NIOSH is proposing what

1 could be considered a very, very conservative
2 bounding of the internal dose. The -- if we
3 even bring into the equation consideration of
4 enriched material, we'd perhaps double the
5 dose, but that would still provide an upper
6 bound for the dose.

7 But this is a troubling situation and -- and
8 members of the workgroup felt that it was -- it
9 was just too much of uncertainty to recom-- or
10 to have a recommendation to the Board, and so
11 we basically did not have a motion of any
12 action to bring to you. It's an -- I hate to
13 lay this at your feet, but this is the
14 situation where basically we're not -- want to
15 reach an agreement, based primarily on our
16 uncertainties associated with this enriched
17 uranium. And I would ask, if I haven't
18 characterized that correctly, that members of
19 the workgroup who want to certainly correct it.
20 I -- I think I did a reasonable job of...

21 **DR. ZIEMER:** Let me ask this question, based on
22 your statement that it was indicated to you --
23 apparently by NIOSH -- that one possibility
24 would be to include the U-235 in the bounding
25 calculations. And was this discussed by the

1 workgroup and, if that were done, does the
2 workgroup agree that bounding can occur?

3 **DR. POSTON:** It was -- it was only part of the
4 conversation. It was -- we didn't ask NIOSH to
5 do that. It was an estimate by those of us who
6 knew something about internal dose -- Jim Neton
7 and so forth -- and we speculated that -- that
8 it would increase the dose, perhaps as much as
9 a factor of two. So -- but we -- we didn't do
10 those calculations, no. And we basically --
11 gee, whiz, I just had a senior moment. I
12 forgot the rest of your question.

13 **DR. ZIEMER:** Well, I -- what I was wondering
14 was was there any agreement in the workgroup
15 that bounding could occur with the inclusion of
16 U-235, if that was the issue. Jim?

17 **DR. POSTON:** Oh, no, the -- there was no
18 agreement. In fact, the -- again, we were in a
19 same situation as Ms. Munn's -- half and half
20 basically saying we could and the other half
21 said they were concerned about -- I think the
22 word that was used was "speculation."

23 **DR. ZIEMER:** Okay. Jim?

24 **DR. NETON:** Yeah, I -- I agree with Dr. Poston.
25 It was discussed whether -- you know, if -- if

1 we were to assume that the uranium that was
2 processed in -- in Building 23 were two percent
3 enriched, the doses would approximately double.
4 But I think the central question is, is it
5 likely that two percent enriched uranium was
6 even processed in Building 23 in '48 and '49,
7 and I -- it's NIOSH's position still that --
8 that that's very unlikely. But it is true that
9 if it were two percent enriched uranium, it
10 would double the dose. We see no evidence that
11 any enriched uranium at all was handled in --
12 at -- at Chapman Valve in 1948 and '49.

13 **DR. POSTON:** I failed to --

14 **DR. ZIEMER:** Do we have a phone person?

15 **DR. BRANCHE:** You can ask. There might be.

16 **DR. POSTON:** I failed to mention that one of
17 the things that I think -- I'm speaking
18 personally. One of the things that I hung my
19 hat on was there's this huge report from H.K.
20 Ferguson regarding the -- the activities at
21 Chapman Valve during this period, it's
22 extremely detailed, and -- about everything
23 that we assumed was going on there originally -
24 - and there's no mention of any activities or
25 any elevated concentrations of uranium. It was

1 all associated with machining the rods for the
2 Brookhaven reactor.

3 **DR. ZIEMER:** Thank you. I -- I'm nonetheless
4 going to call for a motion in just a moment. I
5 want to determine whether any petitioners are
6 on the line.

7 **DR. POSTON:** Mike has a --

8 **DR. ZIEMER:** Hang on, Mike, let's see if
9 there's a petitioner on the line, then we'll --
10 are there any petitioners on the line from
11 Chapman Valve?

12 (No responses)

13 Apparently not. Okay, Michael.

14 **MR. GIBSON:** Just as a member of the workgroup,
15 you know, one of the concerns was not only the
16 one sample, it was the lack of the origin of
17 that sample and the history thereof, and what
18 other operations may have went on. So it's --
19 it's not just including that one sample, in my
20 opinion.

21 **DR. ZIEMER:** Brad? Hang on -- yes?

22 **MR. BROEHM:** Dr. Ziemer, I just wanted to
23 remind you that Sharon Block from Senator
24 Kennedy's office is on the phone and I think --

25 **DR. ZIEMER:** Oh, she is on the line, okay.

1 **MR. BROEHM:** -- wants to make a statement.

2 **DR. ZIEMER:** Let-- let's hear from Sharon if
3 she's on the -- Sharon, are you there?

4 **MS. BLOCK:** I am.

5 **DR. ZIEMER:** Oh, would you have some comments
6 for us?

7 **MS. BLOCK:** Yes, and -- and thank you for
8 recognizing me. I mean Senator Kennedy's, you
9 know, position on this has been clear
10 throughout and I think he -- he continues to
11 believe that the petition should be granted,
12 that, you know, too much time has passed and it
13 -- it's time to give some, you know,
14 compensation and closure to the -- to the
15 workers of Chapman Valve. The program -- and
16 he knows, since he was there when the program
17 was designed, was supposed to make timely
18 decisions. But if today the Board isn't
19 prepared to grant the petition, you know, we
20 think it's really important that the Board take
21 the time, even if it means more time, to make
22 the right decision. And -- and one thing that
23 -- that our office has been very concerned
24 about is that the petitioners and -- and our
25 office have not been getting information in a

1 timely manner. We saw the Folle report that --
2 that was just being discussed just last night
3 and my understanding is that the petitioners
4 didn't get it really until later last night and
5 that -- that has been a pattern and -- and it's
6 a concern because I think it goes to the
7 confidence that especially the petitioners have
8 in this process where they, you know, feel that
9 they've been left out of some of the
10 information. So to -- to have had that
11 information circulated so -- so recently and
12 then to have, you know, an ultimate vote on the
13 petition I think would be very troubling for
14 them, especially considering, as -- as the
15 Board was just discussing -- how much
16 uncertainty there is around what happened at
17 Chapman Valve. So Senator Kennedy's position
18 has remained consistent. He thinks it's time
19 to have the petition granted, but if that's not
20 going to happen, then there needs to be, you
21 know, some -- some feeling of resolution and
22 confidence for the petitioners in -- in the
23 Board's decision, and that can only happen if
24 there is some resolution of this uncertainty.
25 I thank you for the opportunity.

1 **DR. ZIEMER:** Okay, thank you for your input on
2 that.

3 Let's see, we have a comment from Brad Clawson
4 and then from John Poston.

5 **MR. CLAWSON:** Every time we start talking about
6 this, and -- and me and John's had some very
7 heart-to-heart talks on this, one of the things
8 is I like to use a percentage instead of just
9 one or two samples because what we've got to
10 realize is this one sample is 50 percent of
11 what we have for our data. It has been proven
12 by the Folle letter. It's gone through all
13 this, and I just -- yes, I'm the one that used
14 the term "speculation" and maybe that wasn't
15 the best words, but the thing is is we cannot -
16 - we cannot just discard this sample, and this
17 has always been a big issue. We -- we came up
18 with the Dean Street, and as many of these
19 sites that we have found, we have ended up with
20 finding that we -- we can't get all the
21 information for it, and -- and I realize that.
22 But we just can't discard this sample, either.

23 **DR. ZIEMER:** John, and then Jim.

24 **DR. POSTON:** Yeah. Well, Brad, that -- what
25 you say is true, if you regard the samples that

1 were taken outside the building. But that's
2 not true in terms of the external dosimetry,
3 it's not true in terms of the internal
4 dosimetry 'cause we have plenty of air
5 monitoring results and so forth, which were the
6 basis of the -- of the NIOSH evaluation for the
7 intakes associated with the workers. We're
8 talking about the workers that are inside the
9 building, and that's what we're trying to
10 assess, their dose. The sample was not inside
11 the area that we're concerned about. And you
12 know, the speculation -- regardless of what it
13 is, the speculation is that it probab-- it came
14 from the DOE -- DoD operations at a time period
15 well after the -- the period of time in
16 consideration.

17 I'm going to do what Ms. Munn did and I'm going
18 to make a motion so that we can discuss this
19 further. I would move that -- as a -- as an
20 individual; this is not a workgroup motion. I
21 would move, as I did before, that based on the
22 information that the workgroup -- that we have
23 reviewed, that it's my opinion that we should
24 deny the petition -- the SEC petition.

25 **DR. ZIEMER:** And that is your motion?

1 **DR. POSTON:** That's the motion.

2 **DR. ZIEMER:** And is there a second?

3 **DR. ROESSLER:** I second that.

4 **DR. ZIEMER:** And seconded. This motion is now
5 open for discussion. And Jim, you were at the
6 mike a moment ago. Did you have a comment
7 or...

8 **DR. NETON:** I think Dr. Poston substantively
9 addressed what I was going to say, which is
10 that the -- the 50 percent issue has been
11 raised, but the one sample that was taken near
12 the loading dock that was enriched was not in
13 the -- necessarily in the workplace. And the
14 fif-- the other sample that was taken in the
15 workplace was natural uranium. And every
16 indication we have from every report that we
17 have for -- for Chapman Valve indicates that it
18 was natural uranium that was sent over to
19 Brookhaven and processed. So I think that's
20 pretty well substantiated.

21 **DR. ZIEMER:** Thank you. Gen Roessler?

22 **MR. GRIFFON:** The enriched sample was -- was
23 outside the building, Jim?

24 **DR. NETON:** No, it was -- it was near the
25 loading dock, just inside the door.

1 **MR. GRIFFON:** But it was in the building.

2 **DR. NETON:** It was in the building, right, but
3 not in the work processes where the -- the
4 grinding and the machining and the milling
5 operations took place. And if you read the
6 Folle report carefully, the reason they took
7 the one sample near the loading dock is because
8 it had some unusual characteristics -- some
9 unusual beta-to-gamma ratios. I think it was
10 elevated differently than what they saw in the
11 -- in the rest of the building, or what they
12 expected. That's why they took the one sample.
13 And the other sample they took in the workplace
14 they took to confirm that it was natural
15 uranium, which is what they expected and is
16 what they found.

17 **MR. GRIFFON:** Right.

18 **DR. ZIEMER:** Thank you. Gen Roessler?

19 **DR. ROESSLER:** Since we talk a lot about weight
20 of evidence, I'd just like to read a couple of
21 sentences out of the Folle report because we're
22 -- we're trying to determine what that sample
23 meant. And in this report he says -- just
24 putting the whole thing in perspective, I think
25 -- (reading) It is highly unlikely that any

1 work with enriched uranium could have taken
2 place at this site without leaving a paper
3 trail. There was very little of this material
4 available at the time this work was done at
5 Chapman. It is also unlikely because of
6 security concerns. Few, if any, private
7 companies would have been allowed to work with
8 enriched material because, as far as I know,
9 only government facilities were allowed to
10 handle it.

11 **DR. ZIEMER:** Thank you. Other comments? We're
12 -- we're discussing now the motion that's
13 before us. Yes, Mark?

14 **MR. GRIFFON:** Just a -- I -- I mean I just
15 wanted to remind us all that -- and this was
16 true for the Blockson case, but it's also true
17 here -- that -- Paul, you asked the question
18 about did we consider, if the two percent were
19 used, could we bound. And -- and NIOSH
20 responded correctly. NIOSH's criteria is to
21 demonstrate that they have sufficient
22 information to bound doses. But we as a Board
23 put in place procedures that said we want to
24 see example dose reconstructions that show that
25 they can bound. And so therefore these models

1 and this -- this discussion of 20 picocuries
2 per liter for the radon or, in this case, you
3 know, using two percent, are not on the table,
4 in my opinion. I mean -- well, in reality,
5 they're not on the table. So you know, that --
6 that's just one thing for people, to remember
7 our own procedures. We -- we've asked that in
8 this SEC process we get examples and -- and
9 have demonstration that -- and it's a -- I
10 agree, it's above and beyond the criteria
11 established for NIOSH, but we've set that in
12 place for ourselves.

13 The second comment is that I think when -- when
14 John presented -- and I think we -- we have
15 all been using that word a little bit, that
16 "speculation", and I think John presented --
17 which I think is true, as well, Folle
18 speculates, I think you -- you said in your --
19 in your presentation, that it could have been
20 from Naval operations after. I mean there --
21 there's a bunch of -- of theories we've had
22 discussed around the workgroup and speculation
23 on how this sample might get there. The one
24 reality now at this point I think we -- we can
25 all come to a conclusion on is that it is an

1 enriched sample, so it came from somewhere
2 else. And was it likely during that time
3 period? You know, I -- I think it's less
4 likely, for sure. I will agree to that. But
5 we don't have an answer on where it could have
6 come from and I'm a little uneasy to vote on --
7 on speculation at this point that -- and also
8 the fact that we haven't had another proposal
9 of well, it's a real piece of data, maybe we
10 need to reconsider that in the way we bound our
11 doses. That hasn't been offered. So for those
12 two reasons, I'm -- I'm voting against the mo--
13 or I'm speaking in -- in -- against the motion.

14 **DR. ZIEMER:** Okay. Wanda, and then Brad.

15 **MS. MUNN:** I think Brad was up first.

16 **DR. ZIEMER:** Oh, Brad first? Okay.

17 **MR. CLAWSON:** Well, I'm going to fin-- finish
18 the rest of the statement that Guinevieve (sic)
19 started. (Reading) And other Massachusetts
20 sites were surveyed, forerunners of the MAD
21 group. This site was found to have various
22 uranium enrichments. This was a
23 (unintelligible) landfill, I believe
24 (unintelligible) was an individual. The report
25 was published on the landfill, but I do not

1 know the actual title of the report. I don't
2 know of any conditions between facilities, but
3 it does indicate that other contamination
4 sources are present in the general area.
5 I can tell you today that I have product from
6 other facilities that you would never find a
7 paper trail. The only thing it shows up on is
8 my criticality controls because I don't own
9 that product, but I am storing it. So you
10 cannot tell me that there couldn't be something
11 else that could have come in there or anything
12 else. This is pure speculation. Now -- and we
13 can say everything we want, but you know as
14 well as I do that all of these DOE sites, from
15 one site to the other, shared different stuff,
16 research, everything else like that, and the
17 paper trails, as we have seen in many things,
18 is not the best. And that's why -- that's why
19 I can't accept it and that's why I'm voting
20 against it.

21 **DR. ZIEMER:** Wanda Munn?

22 **MS. MUNN:** I just had a -- a thought with
23 respect to something that Mark said. My memory
24 -- which is not always perfect, unfortunately -
25 - led me to believe that we had been speaking

1 of a specific site when we had asked for NIOSH
2 to demonstrate that they could or could not do
3 something or -- I didn't realize that we had
4 adopted that as --

5 **MR. GRIFFON:** It's in our procedure.

6 **MS. MUNN:** -- as a procedure for the Board. We
7 -- we have done that?

8 **MR. GRIFFON:** Yes, yes.

9 **MS. MUNN:** I need to go back and reread that.
10 I had thought that we had been working with a
11 specific site at that time.

12 **DR. ZIEMER:** Jim -- Jim can speak to that
13 issue.

14 **DR. NETON:** I think Mark's -- Mark's correct on
15 that, but I want to reiterate that NIOSH has
16 not indicated that we would double these doses.
17 We have indicated that if it were two percent
18 enriched uranium and determined to be two
19 percent enriched uranium, then the dose would
20 double. But we're not suggesting that we're
21 going to double the doses to two percent in the
22 --

23 **MR. GRIFFON:** Well, I'm just saying I hear that
24 discussion around the table. I'm not saying
25 you -- you know, but I'm saying I hear that as

1 --

2 **DR. NETON:** Yeah, agreed.

3 **MR. GRIFFON:** -- you know, if this was done,
4 couldn't it be bounded and --

5 **DR. NETON:** Right, but I just want to make
6 clear, we're not suggesting at this point that
7 we would double the doses merely to make this
8 problem go away. That's not the situation.

9 **MR. GRIFFON:** Okay.

10 **DR. ZIEMER:** Okay, other comments, pro or con,
11 supporting or against the motion? Or are you -
12 - okay, Phil?

13 **MR. PRESLEY:** Paul, can I speak?

14 **DR. ZIEMER:** Yeah, Robert, then Phil.

15 **MR. PRESLEY:** We're talking about enriched
16 uranium, and at the time that this was
17 supposedly to have happened, this country was
18 just beginning to enrich uranium. And every
19 minute particle of enriched uranium that was
20 produced was captured and the material that it
21 was captured off of was washed and checked and
22 cleaned and checked -- not to say that some of
23 it got out, but at that time that we were
24 producing that type of material, there were
25 procedures in place because we were trying to

1 get every gram that we possibly could to make a
2 weapon. And the possibility of something like
3 that getting up there is very, very minute
4 because of the procedures that were taken at
5 Oak Ridge to capture all of the material that
6 they could make just as fast as they could make
7 it. And that's -- that's a little history.

8 **DR. ZIEMER:** Okay. Phil?

9 **MR. SCHOFIELD:** I just -- until that issue is
10 completely settled, I -- I still have a little
11 heartburn because we're talking about the
12 potential for increased dose to people who
13 actually worked with the stuff on a daily
14 basis. We're talking about real people here,
15 we're not talking about air -- you know, the
16 air or the ground contamination, but rather
17 we're talking about potential for the people to
18 ingest it or inhale it, which would make a
19 difference in their -- whether they -- they
20 could receive compensation or not.

21 **DR. ZIEMER:** Okay. Let's see, who was next?
22 Jim, are you next?

23 **DR. LOCKEY:** Was there -- in the Ferguson
24 report was there any mention of any process at
25 this facility utilizing enriched uranium?

1 **DR. NETON:** No. No, there's a very detailed
2 description of all the activities in Building
3 23. It's a hundred-page report or so, and
4 there's noth-- no indication that there was any
5 enriched uranium in 1948 and '49 processed at -
6 - at this facility. And DOE has searched their
7 records quite a bit most recently and have
8 found no contracts or any indication that
9 anything other than this process occurred at
10 Chapman Valve in those two years.

11 **MR. GRIFFON:** Ji-- Jim, it's a very -- you said
12 of -- it's a very detailed description, which I
13 will agree, of all the activities that went on
14 in Building 23 during this time period? I
15 think it's a very detailed description of this
16 project that went on in Building 23.

17 **DR. NETON:** Well, yes, right. That's -- that's
18 true. This -- this contract with the AEC to
19 process these slugs in that time frame. But
20 there is no indication that any other
21 radiological activities occurred in that
22 facility, and I think that's the central issue.
23 This is what made this site an AWE in the first
24 place, this operation, and we believe we've
25 bounded the doses for this operation. We have

1 found no indication of any other radiological
2 operation funded by the AEC in 1948 and '49,
3 none. And the sample that was taken decades
4 later, we have no idea where it came from.

5 **DR. ZIEMER:** Okay. John, then Josie.

6 **DR. POSTON:** I'd like to try to summarize again
7 for -- for everybody. There -- there -- I
8 don't think there's every be-- ever been any
9 discussion or dissension that the external
10 doses could be reconstructed because of the
11 film badge data that's available for the site.
12 The -- the approach taken by NIOSH to
13 reconstruct the internal doses is what in our
14 business we call conservative, but -- but it --
15 it -- one could also characterize it as a huge
16 overestimate, because what they did was they
17 took the highest concentrations and assumed
18 that those concentrations existed over the
19 entire period of consideration, even though the
20 operation, in my recollection, only lasted a
21 couple of months.

22 So here we have these workers who are assumed
23 to be chronically exposed at the highest level
24 that was measured over this entire period. And
25 as I told the workgroup, if the probability of

1 causation then doesn't exceed 50 percent, it
2 will never exceed 50 percent, so that --
3 regardless of what you do. And I understand we
4 have this one sample. But again, it was not
5 taken in the work area. The sample that was
6 taken in the work area, if you want to say fif-
7 - talk about percentages, Brad, the sample that
8 was taken in the work area showed no enriched
9 uranium. So -- I mean I -- I have concern,
10 too, but it seems like we're just marching down
11 this road. We -- we owe it to the folks to
12 make a decision.

13 **DR. ZIEMER:** Josie?

14 **MS. BEACH:** Once again I would like to point
15 out that we're discussing a document -- a six-
16 page report that I just received this morning
17 in its entirety and haven't really had a chance
18 to look at. I would like to table this motion
19 also.

20 **DR. ZIEMER:** Are you making a motion to table?

21 **MS. BEACH:** Yes.

22 **DR. ZIEMER:** There's a motion to table. Is
23 there a second to the motion to table?

24 **MR. GIBSON:** I'll second.

25 **DR. ZIEMER:** It's been seconded. Okay, we will

1 vote on the motion to table.

2 **DR. BRANCHE:** Ms. Beach? Regarding --

3 Regarding to table, Ms. Beach?

4 **MS. BEACH:** Yes.

5 **DR. BRANCHE:** Mr. Clawson?

6 **MR. CLAWSON:** Yes.

7 **DR. BRANCHE:** Mr. Gibson?

8 **MR. GIBSON:** Yes.

9 **DR. BRANCHE:** Mr. Griffon?

10 **MR. GRIFFON:** Yes.

11 **DR. BRANCHE:** Dr. Lockey?

12 **DR. LOCKEY:** No.

13 **DR. BRANCHE:** We'll get -- no. Ms. Munn?

14 **MS. MUNN:** No.

15 **DR. BRANCHE:** Mr. Presley?

16 **MR. PRESLEY:** No.

17 **DR. BRANCHE:** Dr. Poston?

18 **DR. POSTON:** No.

19 **DR. BRANCHE:** Dr. Roessler?

20 **DR. ROESSLER:** No.

21 **DR. BRANCHE:** Mr. Schofield?

22 **MR. SCHOFIELD:** Yes.

23 **DR. BRANCHE:** Dr. Ziemer?

24 **DR. ZIEMER:** No.

25 **DR. BRANCHE:** The noes have it.

1 **DR. ZIEMER:** Motion fails, so the original
2 motion is back before us. Further discussion?

3 **MR. GRIFFON:** I just want to -- one thing that
4 we had discussed a little bit at the workgroup
5 meeting and now with Folle's letter, you know,
6 it seems to have maybe added importance -- in
7 my mind, anyway -- and -- and -- is this notion
8 of the Naval operations which could have
9 happened, which -- which are -- I -- just for
10 everyone on the phone or in the room, I mean
11 that wouldn't be covered exposures. So you
12 know, if -- and -- and we -- I think we kind of
13 dead-ended it at the workgroup that there --
14 there'd be no way to -- to verify with the Navy
15 or with DoD. It could end up, you know, being
16 a lengthy process, but I don't know if -- if --
17 is -- in -- you know, I've -- I've worked at
18 several of these facilities and -- and I've
19 seen this in more than one instance, and it
20 wouldn't surprise me if this was a result of
21 later operations in-- involved in the Navy.
22 But again, I'm in this speculation situation
23 and if -- if -- if there's any way -- I mean I
24 don't know if NIOSH has made any -- I don't
25 think we asked them to, but I don't know if

1 they have an opinion on that, on whether it
2 would take months, years, it would take -- you
3 know, if there were any way to follow up on --
4 and Mr. Folle gave a little more precise
5 information or -- or at least his memory was a
6 specific submarine op-- you know.

7 I also did -- from correspondence with the Army
8 Corps of Engineers on -- on the cleanup side, I
9 -- I did also get some sense that there was
10 some work for the Navy, but it didn't talk
11 about any -- I was looking for some information
12 that might have said they worked with nuclear
13 fuels, but there was no indication of that, it
14 was more valve work. But again, they could
15 have been, you know, contaminated or whatever,
16 so I -- let Larry respond.

17 **DR. ZIEMER:** Larry.

18 **MR. ELLIOTT:** We have not asked the Navy for
19 any information about activities that were done
20 for the Department of Defense under their
21 auspices for this particular site, but we have
22 for other sites. And we've -- in those
23 instances, we've consistently received a lot of
24 reluctance and reticence in our responses.
25 There is no regulatory way that we have to

1 DR. BRANCHE: Mr. Gibson?
2 MR. GIBSON: No.
3 DR. BRANCHE: Mr. Griffon?
4 MR. GRIFFON: No.
5 DR. BRANCHE: Dr. Lockey?
6 DR. LOCKEY: Yes.
7 DR. BRANCHE: Ms. -- Doc-- Ms. Munn?
8 MS. MUNN: Yes.
9 DR. BRANCHE: Mr. Presley?
10 MR. PRESLEY: Yes.
11 DR. BRANCHE: Dr. Poston?
12 DR. POSTON: Yes.
13 DR. BRANCHE: Dr. Roessler?
14 DR. ROESSLER: Yes.
15 DR. BRANCHE: Mr. Schofield?
16 MR. SCHOFIELD: No.
17 DR. BRANCHE: Dr. Ziemer?
18 DR. ZIEMER: Yes.
19 DR. BRANCHE: And then we will correspond with
20 Dr. Melius to get his vote.
21 DR. ZIEMER: I believe the count at the moment
22 is six in favor and five opposed, and since we
23 lack one of the votes, there's a possibility
24 for a tie vote here --
25 DR. BRANCHE: That's true.

1 **DR. ZIEMER:** -- and so I cannot announce the
2 outcome. We -- we will not know the outcome
3 until we obtain Dr. Melius's vote. If Dr.
4 Melius votes no, that would be a tie vote and
5 the motion would be lost. If Dr. Melius voted
6 yes, then the motion would carry. We will
7 await that -- yes?

8 **MR. GRIFFON:** Can -- I just wanted to make a
9 comment that if it does result in a tie vote, I
10 -- I think -- you know, my sense, anyway, is
11 that we're not -- it's not a lost cause here.
12 I think this is as close as Blockson was, in my
13 mind, and -- you know, we may -- there may be a
14 way to resolve this, so I don't want -- just --
15 just for the sake of the Board, I don't want --

16 **DR. ZIEMER:** I'd simply point out that --

17 **MR. GRIFFON:** -- everybody getting frustrated
18 about this, you know.

19 **DR. ZIEMER:** -- if it's a tie vote, we have no
20 recommendation --

21 **MR. GRIFFON:** Right.

22 **DR. ZIEMER:** -- to make to the Secretary. I --
23 I guess I would need coun-- advice from
24 counsel, and maybe from the Designated Federal
25 Official, as to whether or not such an outcome

1 needs to be reported to the Secretary. We are
2 -- we would not be making a recommendation
3 because we would have none to make.

4 **MR. GRIFFON:** Did-- didn't we have a tie vote
5 before on this? Yeah, so -- and you didn't
6 report --

7 **DR. BRANCHE:** On this issue?

8 **MR. GRIFFON:** Yeah.

9 **DR. BRANCHE:** And you continued to -- your
10 deliberations as a result.

11 **MR. GRIFFON:** We went back to the workgroup,
12 yeah, which I don't know --

13 **DR. BRANCHE:** You certainly have that option.

14 **DR. ZIEMER:** Yeah, we had -- we had no -- we
15 had no recommendation to make at that point.

16 **DR. BRANCHE:** Counsel's coming forward.

17 **MS. HOWELL:** Should the Board reach a
18 determination that is a split vote and you do
19 not believe that you can move forward and reach
20 another determination -- I think in the
21 previous instance you turned this back over --

22 **DR. BRANCHE:** To the workgroup.

23 **MS. HOWELL:** -- to the workgroup. Should you
24 have a six-six vote and not believe that there
25 are any outstanding issues and that there's no

1 further work that the Board can do to change
2 the outcome, then you could report that to the
3 Secretary in a letter.

4 **DR. ZIEMER:** Thank you. We will await the vote
5 and, depending -- depending on that, if it ends
6 up to be a tie there would possibly be an
7 opportunity to pursue some additional matters,
8 although it's not clear to the Chair at the
9 moment whether or not there's anything even in
10 this most recent letter that -- that helps us
11 along the way, but we can determine that after
12 we see where we are on the vote.

13 Let's see, Santa Susana -- well, let's get to
14 Texas City Chemicals. Do we need to take our
15 break?

16 **MR. GRIFFON:** Yeah, let's do --

17 **DR. ZIEMER:** Let's take a --

18 **MR. GRIFFON:** -- a break.

19 **DR. ZIEMER:** Try to keep it as concise as you
20 can. Let's try to get it to ten minutes so we
21 can move forward here rapidly -- ten-minute
22 break.

23 (Whereupon, a recess was taken from 10:15 a.m.
24 to 10:30 a.m.)

25 **DR. BRANCHE:** We're going to get started again,

1 and we're going to -- I'm going to ask the
2 phone participants -- again, it is critical
3 that everyone participating by phone mute your
4 lines. As well, it is equally critical that
5 you not put this line on hold if you have to
6 step away. It is far better for you to hang up
7 and dial back in than to put us on mute. Your
8 putting us -- I'm sorry, your putting us on
9 hold interrupts the entire line for everyone.
10 Thanks for your cooperation.

11 (Pause)

TEXAS CITY CHEMICALS, DR. PAUL ZIEMER

12 **DR. ZIEMER:** Dan, are you going to go first for
13 Texas City, or [Identifying Information
14 Redacted]?

15 **DR. MCKEEL:** (Off microphone) (Unintelligible)

16 **DR. ZIEMER:** [Identifying Information Redacted]
17 going...

18 **DR. MCKEEL:** (Off microphone) (Unintelligible)

19 **DR. ZIEMER:** Oh, okay.

20 **DR. MCKEEL:** (Off microphone) I think she
21 (unintelligible) on the phone.

22 **DR. ZIEMER:** Yeah, she -- she --

23 **DR. MCKEEL:** (Off microphone) (Unintelligible)

24 **DR. ZIEMER:** Be what?

25 **DR. MCKEEL:** (Off microphone) (Unintelligible)

1 our assignment from the last meeting.
2 I did have one question to just refresh me on -
3 - and I can't remember, I know that the
4 surrogate data group was going to look at this
5 petition, but was SC&A tasked to do any sort of
6 review? I --

7 **DR. ZIEMER:** You know --

8 **DR. MCKEEL:** -- that's a confusing --

9 **DR. ZIEMER:** -- Dan --

10 **DR. MCKEEL:** -- point in my mind.

11 **DR. ZIEMER:** -- I will have to check the -- I
12 don't think they were, but I will have to
13 double--

14 **DR. MCKEEL:** Okay.

15 **DR. ZIEMER:** I think we were -- I think Dr.
16 Melius asked that the workgroup look at it
17 first and determine what tasking was needed --

18 **DR. MCKEEL:** That's fi--

19 **DR. ZIEMER:** -- was my recollection.

20 **DR. MCKEEL:** That's fine.

21 **DR. BRANCHE:** It was -- it was the petitioner's
22 request that they be assigned it, but --

23 **DR. ZIEMER:** No, but I -- I think we can check
24 the minutes, but my recollection is that Dr.
25 Melius didn't want to task SC&A until the

1 workgroup had a chance to look at it and define
2 what the tasking would be.

3 **DR. MCKEEL:** Tha-- that's fine. Dr. Melius did
4 write me an e-mail and let me know that at the
5 -- I believe the last, or maybe the first,
6 surrogate data workgroup meeting they had to
7 spend the time on defining those criteria and -
8 -

9 **DR. ZIEMER:** Right.

10 **DR. MCKEEL:** -- would not have time to get to
11 Texas City, so we're all updated on that part.
12 So in the meantime, I mention to all of you all
13 that we were looking for a set of records that
14 really fell into two categories: Permits and
15 court records from two subsequent owners of the
16 Texas City Chemicals site, Borden and the
17 subsequent owner after that, Amoco. And Borden
18 and Amoco were involved in a long-running
19 lawsuit which started about the time that the
20 plant itself was shut down in the late 1970s,
21 somewhere around '78 the court suit started,
22 ran at least until 1990. And so there are
23 really quite a few documents related to that,
24 and -- and the reason I thought getting those
25 records was probably going to be germane to

1 what we're all working on is that the issue was
2 contamination at the site, who would pay to
3 have it removed. And so hopefully that --
4 those records would get into radioactivity
5 associated with the phosphogypsum piles related
6 to the uranium recovery operations from the AEC
7 back in the '50s when the recovery building was
8 built and -- and used for that purpose.
9 Subsequently there were a lot of interim
10 negotiations, but Congressman Nick Lampson's
11 office got involved and his staff person, Kathy
12 Guillory -- and Ray, that's G-u-i-l-l-o-r-y --
13 and they were really instrumental in talking to
14 some of the legal counsel at I think British
15 Petroleum now owns the site. Anyway, they were
16 able to get a number of those court records.
17 They sent me a copy and then I suggested that
18 they forward all those court records to both
19 NIOSH and the Board so you would also have
20 them. And very recently I sent Dr. Ziemer a --
21 an excerpt showing that in fact those records
22 do contain radioactivity measurements that I
23 think will be really helpful in bounding the
24 dose at Texas City or -- or at least getting us
25 farther along that -- that road.

1 As the Board well remembers, this is a really
2 interesting site where basically there -- there
3 is no real data of any kind. There's certainly
4 no film badge monitoring, but no air sampling
5 data, no -- no any-- no urin-- bioassay data,
6 so -- so the doses which NIOSH says they can
7 reconstruct are being constructed from models
8 and from extrapolation of other sites, and
9 that's why I think the Board felt like this
10 would be a good case to send to the surrogate
11 data group because it's a great test case.
12 So anyway, that part of the data capture
13 efforts was successful and -- and hopefully
14 those documents will be useful.

15 The permits we were seeking were two in
16 particular. One, the Department of Energy
17 facility description ends the uranium residual
18 period at 1977, and that date coincides with
19 the date that a lot of workers really severed
20 their relationships with the plant. We have at
21 least three people who know the recovery
22 building was still standing in 1977. What we
23 have never elicited in any of the worker
24 meetings down there, the town hall meetings or
25 my interactions with the workers, is anyone who

1 knows precisely when that recovery building was
2 torn down. Three people at least know that it
3 was there in 1977. But we thought it would be
4 useful to know when it was actually demolished
5 and hauled away, as possibly a better end point
6 for the residual period. So that was one
7 permit or set of permits that we were looking
8 for.

9 The other ones had to do with the phosphogypsum
10 piles, and it was quite clear that when Borden
11 bought the plant from Texas City Chemicals,
12 Texas City went bankrupt, their first decision
13 was -- they knew the -- they knew the -- the
14 piles were radioactively contaminated beyond
15 simply the -- the natural uranium from the
16 uranium ore that's in phosphate rock. But this
17 product had -- had extra radioactivity
18 associated with it, so their first decision was
19 they were going to store it -- I believe at
20 first temporarily -- on-site. But you know,
21 like those temporary storage things get to be,
22 basically it got to be a permanent site on --
23 on-site.

24 Then the subsequent owners -- I think it took
25 them a while to get through the idea they --

1 they bought the site as-is, Borden did, and
2 then they -- then -- now I'm not sure how much
3 I -- I don't think they really knew very much
4 at all about the uranium recovery AEC
5 operations. But anyway, when Borden then sold
6 it to Amoco, at least by that time they knew
7 that there was radioactivity on-site that had
8 to be cleaned up. And for reasons that aren't
9 clear to me yet from reading those documents,
10 Amoco decided to buy it anyway. Then they had
11 second thoughts about it, they want-- oh, well,
12 they wanted to build a coal-fired plant, and it
13 was a consortium -- I can't remember, there
14 were three companies involved -- and they were
15 -- they had decided that the old TCC site was
16 the place to build this large coal-fired plant,
17 and so they were proceeding along and then they
18 found out that the phosphogypsum piles and all
19 that were going to be a problem. But the real
20 problem was the plant cost too much. The cost
21 doubled or tripled. They abandoned that, and
22 then they were left with no -- no site for the
23 coal plant, but all this radioactive material
24 that they wanted to get off-site, so they sued
25 each other about who -- who was supposed to pay

1 in that. So anyway, that's where that goes.
2 Now what we do not have, though -- and yet it
3 may be in those court records, but I haven't
4 found it -- is any information about when those
5 piles were actually removed. And -- and we
6 thought maybe the permits would have more
7 information about the type of radioactivity --
8 it might have a bearing on where they could be
9 disposed of, for example.

10 So the first thing that Kathy Guillory and
11 Congressman Lampson's office did was to go to
12 the Texas Commission on Environmental Quality,
13 TCEQ, who indicated at first that, among about
14 1,000 records, they -- they thought they
15 possessed those permits that we were interested
16 in and -- but they wanted to charge a very high
17 fee to get those copied and researched. So
18 Kathy Guillory, trying to save the Texas
19 taxpayer some money, then elicited the help of
20 a state representative there, Craig Eiland, E-
21 i-l-a-n-d, and his staff person, Amanda
22 Hudgins, and they both then went to TCEQ. They
23 got me to write an e-mail that defined exactly
24 what we were looking for, and the end result
25 was that TCEQ finally said well, they had some

1 records but they don't really think they have
2 the relevant records that we're looking for.
3 They then suggested that Representative Eiland
4 pursue looking for the records at the Nuclear
5 Regulatory Commission and the State Department.
6 The latter I don't understand at all, but
7 Representative Eiland's staff did inquired of
8 NRC, and NRC said no, we were not the -- the
9 right agency; you should look for those records
10 at the Department of Energy. Which did at
11 least make me smile slightly because that's
12 where the facility description originated in
13 the first place. So in fact that's what we
14 will do is pursue that and see if those permits
15 exist.

16 I'm not ready to give up. I think they -- they
17 must -- there must be State of Texas permits.
18 So that's basically, I think, where we stand
19 right now, and I think that's about all that I
20 have to report.

21 **DR. ZIEMER:** Thank you very much, Dan.

22 [Identifying Information Redacted], the
23 petitioner, is also on the line and let's hear
24 from her next. [Identifying Information
25 Redacted], are you there?

1 **UNIDENTIFIED:** [Identifying Information
2 Redacted] is not here. She's ill. We have
3 some other representatives.

4 **DR. ZIEMER:** Was there someone else that was
5 speaking in her behalf?

6 **UNIDENTIFIED:** Yes, sir.

7 **DR. ZIEMER:** Was that --

8 **UNIDENTIFIED:** (Unintelligible)

9 **UNIDENTIFIED:** I have (unintelligible) you
10 about the pile that you was discussing.

11 **DR. ZIEMER:** Okay, can --

12 **UNIDENTIFIED:** His name is Mr. Watterback.

13 **DR. ZIEMER:** Okay.

14 **MR. WATTERBACK:** No, my name is Joe Watterback
15 and I went to work there in January of 1957 and
16 stayed through November of 1977. And if I
17 understood Dr. McKeel correctly a while ago, he
18 was saying that -- don't know when the piles
19 were removed, what date. But as we speak right
20 now, the gypsum piles and the piles are still
21 there, have never been removed. There's about
22 a 15-acre gypsum pile possibly 30 feet high
23 that's still standing today, and that's about
24 all I can tell you on that.

25 **DR. ZIEMER:** Okay, thank you for that

1 additional information.

2 Was there anyone else there that had comments
3 on the phone line?

4 **UNIDENTIFIED:** Yes, sir, just one moment.

5 **MR. INGRAM:** My name's James Ingram. I left in
6 1969 --

7 **DR. ZIEMER:** Give us your name again, please?

8 **MR. INGRAM:** James Ingram, that's I-n-g-r-a-m.

9 **DR. ZIEMER:** Thank you. Go ahead.

10 **MR. INGRAM:** I went to work there in 1957 and
11 left in 1969, went to work for Amoco. Sometime
12 during my tenure at Amoco I was called into the
13 office and asked about the contamination at the
14 Texas City Chemical plant. At that time I had
15 no knowledge of anything of that nature even
16 existed out there. In all the 12 years I was
17 there, there was nobody ever mentioned it. I
18 went into this building during that time and
19 all this strange-looking equipment -- to me, it
20 wasn't fertilizer-making equipment. I just
21 wondered what it was. Nobody there got --
22 questions I asked was what do they do there?
23 Nobody knew at this time. Nobody was told
24 anything.

25 That's about all I can tell you about that

1 part.

2 **DR. ZIEMER:** Okay, thank --

3 **MR. CELESTINE:** This is Frank Celestine and I
4 worked out there from 1956 until 1970.

5 **DR. ZIEMER:** Could you spell your last name for
6 us, please?

7 **MR. CELESTINE:** C-e-l-e-s-t-i-n-e.

8 **DR. ZIEMER:** Okay.

9 **MR. CELESTINE:** There are a lot of things out
10 there -- according to what I heard on this
11 (unintelligible) this morning, there a lot of
12 things so out of date don't even come up to
13 what we know as employees out there. Things
14 happened out there I haven't even heard
15 anything about in a meeting. But we just need
16 to get to the fellas that worked out there that
17 are still alive and can really give you
18 accurate information. All of this information,
19 to me, seems nothing but speculation or
20 somebody trying to give us the runaround in
21 some kind of way. I -- I can't understand
22 that. This thing's been going on long enough
23 to bring it to a conclusion. It looks like
24 every time somebody started in the right
25 direction, another person come up with a motion

1 to table. You keep table that thing you will
2 never get to the bottom of it. You'll never
3 bring it to a conclusion. Now I don't know how
4 many meetings there's been on this subject
5 matter, but I'll tell you a lot of people are
6 getting tired.

7 **UNIDENTIFIED:** And a lot of them are dying.

8 **MR. CELESTINE:** And a lot of them are dying.
9 There are too many people dying with the same
10 complaint that worked out there to say that we
11 weren't contaminated or there was nothing out
12 there to cause their health to deteriorate and
13 come up with the same complaint, all of them
14 dying from cancer. And the two or three that's
15 left don't know how much time they have left
16 'cause they have cancer. Whoever is trying to
17 produce this -- or simulation of production
18 (unintelligible), you will never do that. We
19 worked there and there was giant fans to blow
20 all of that dust-like material out of there.
21 Sometime it was yellow, sometime it was gray,
22 and God knows whatever color or form it may
23 have taken. And they had all these big ol'
24 fans to keep us -- and still we was full of
25 that stuff. And many times we'd take off our

1 respirator or whatever we wore, it was just
2 clogged with that stuff. We'd have to go and
3 get another one and change the filter in
4 (unintelligible) often. I -- I see why
5 everybody's dying of cancer, 'cause they all
6 got, you know, this material out there that's
7 related to it. Thank you.

8 **DR. ZIEMER:** Okay, thank you. Anyone else
9 there?

10 **MR. WATTERBACK:** Yes, this is Joe Watterback
11 again.

12 **DR. ZIEMER:** Yes, Bill (sic)?

13 **MR. WATTERBACK:** I was one of two people that
14 was left out there with Borden after they shut
15 the plant down. I was maintenance supervisor
16 and my immediate boss was the superintendent
17 there, and we were in charge of the contractor
18 that was removing equipment from the plant to
19 put on railroads and (unintelligible) to send
20 to Norfolk, Virginia. And at that time the
21 recovery building was still standing when I
22 left there in November of 1977, and the
23 contractor -- I don't believe the contractor
24 was in there doing the removal work also tore
25 the building down. Someone else, I believe,

1 tore the building down but I cannot confirm
2 that. But the building was still there in
3 1977.

4 **DR. ZIEMER:** Okay, thank you.

5 **MR. WATTERBACK:** That's all -- all I have.

6 **DR. ZIEMER:** Dr. McKeel here has an additional
7 comment.

8 **DR. MCKEEL:** Just to summarize, I think the
9 information you've just heard is basically
10 what's in the worker transcripts, and that's
11 basically our departure point for the
12 subsequent studies. And the real question
13 about the phosphogypsum piles is -- the plant
14 continued to make fertilizer for a long time
15 after the AEC operations stopped, so they were
16 generating phosphogypsum. The point I'm trying
17 to find out, and I think is relevant to what
18 we're doing here, is -- is specifically the
19 phosphogypsum waste that was left over that was
20 really associated with the '52 to '56 period of
21 the SEC. So we're trying to see if that's --
22 was segregated and if we can track that
23 separately --

24 **DR. ZIEMER:** Very good.

25 **DR. MCKEEL:** -- in any way. Right.

1 **DR. ZIEMER:** Okay, thank you very much. And
2 thank you folks on the line. Anyone else on
3 the line had an additional comment?

4 **UNIDENTIFIED:** Yes, one more thing. When the
5 plant went from Texas City Chemical, it went to
6 Smith Douglas --

7 **DR. ZIEMER:** Yes.

8 **UNIDENTIFIED:** -- and then to Borden.

9 **DR. ZIEMER:** Yes, and who --

10 **UNIDENTIFIED:** Okay.

11 **DR. ZIEMER:** -- who was speaking there? Could
12 you identify --

13 **MR. WATTERBACK:** Joe Watter-- Joe Watterback.

14 **DR. ZIEMER:** Yes, okay, thank you. Okay,
15 appreciate that additional clarification.
16 Okay, I think that -- Board members, do you
17 have any questions on Texas -- John Mauro here
18 has a comment on Texas City Chemical.

19 **DR. MAURO:** Dr. Ziemer, during the April
20 meeting in Tampa SC&A was, according to my
21 notes, given direction to begin a focused
22 review of the SEC, with emphasis on the
23 surrogate data strategy where we marry our
24 typical review with the guidance that the
25 working group drafted on the four-step

1 criteria. So yes --

2 **DR. ZIEMER:** Okay.

3 **DR. MAURO:** -- we have underway a review -- a
4 focused review.

5 **DR. ZIEMER:** Thank you for clarifying that,
6 John. Dr. McKeel?

7 **DR. MCKEEL:** Just one final comment about Dr.
8 Mauro's idea. I understand that the four
9 criteria are a Board working document and
10 probably not in a releasable form, but I would
11 still ask -- it certainly would help me to
12 understand the process -- if there's any way to
13 get a version of that document that -- I
14 underst-- just -- I'm interested in seeing it
15 when it can ever be --

16 **DR. ZIEMER:** Actually --

17 **DR. MCKEEL:** -- released.

18 **DR. ZIEMER:** -- I think what needs to be done
19 here is to make sure that you are plugged into
20 the workgroup's activities so you can
21 participate, and any working documents that
22 they have in those workgroup meetings can
23 certainly be made available, I believe. I'm --

24 **DR. BRANCHE:** Tha-- that --

25 **DR. ZIEMER:** I -- I'm not sure what's -- what

1 the workgroup even has at this point.

2 **DR. MCKEEL:** Yes, I understand.

3 **DR. BRANCHE:** But because, Dr. McKeel, you are
4 a co-petitioner --

5 **DR. MCKEEL:** Uh-huh.

6 **DR. BRANCHE:** -- so in that capacity you would
7 also get information --

8 **DR. MCKEEL:** That would --

9 **DR. BRANCHE:** -- as it becomes available, as
10 all petitioners do.

11 **DR. MCKEEL:** That would be wonderful.

12 **DR. BRANCHE:** Of course it would be Priva-- you
13 would receive it after it's Privacy Act
14 cleared, but --

15 **DR. MCKEEL:** Yes, I understand.

16 **DR. BRANCHE:** -- that -- but you -- that's --
17 you would receive it as a -- as a co-
18 petitioner.

19 **DR. MCKEEL:** I understand. Thank you.

20 **DR. ZIEMER:** Thank you. Okay, Board members,
21 any questions on that site?

22 (No responses)

AREA IV OF SANTA SUSANA FIELD LABORATORY
MR. MICHAEL GIBSON

23 Okay, let's move on quickly to the Santa Susana
24 Field Lab. There's not going to be very much

1 to report here, but let me also check to see if
2 we -- we may have someone on the line, but let
3 me start with Mike Gibson, who's the chair, and
4 then Mike -- we'll hear also maybe from one of
5 the petitioners.

6 **MR. GIBSON:** Yeah, Santa Susana site SEC
7 petition 93 was qualified in October. NIOSH
8 presented their evaluation report to us in
9 April. SC&A is currently looking over the site
10 profile, and the working group members are
11 circulating some dates, trying to get a -- a
12 meeting together.

13 **DR. ZIEMER:** Okay, thank you very much. And
14 let's see if we have one of the petitioners on
15 the line. LaVonne --

16 **MS. KLEA:** Yes, I'm here. Can you hear me?

17 **DR. ZIEMER:** Yes, very well.

18 **MS. KLEA:** This is LaVonne Klea. I just would
19 like to give you a brief update on what's going
20 on. I sent you a copy of a lawsuit that was
21 taken by the City of LA National Defense
22 Counsel and Committee to Bridge the Gap against
23 the DOE, requiring them to perform an
24 environmental impact statement. While they've
25 done an 800-page data gap analysis, which has

1 been rejected by the federal judge because they
2 used all the Boeing monitoring data and it's
3 been rejected because they falsified their data
4 by incinerating the samples. And so I'm going
5 to a meeting tonight, a follow-up meeting on
6 that issue of the rejection of their 800-page
7 preliminary data gap analysis.

8 **DR. BRANCHE:** Ms. Klea.

9 **DR. ZIEMER:** Okay, tha--

10 **MS. KLEA:** And that's all I have to report for
11 now.

12 **DR. ZIEMER:** Thank you. I'm -- I'm not sure if
13 we have a copy of what you referred to. Do we?

14 **DR. BRANCHE:** Ms. Klea, this is -- this is Dr.
15 Branche, could -- I'm not able to put my hands
16 on a copy of the lawsuit that you sent -- you
17 sent -- you said you sent copies of?

18 **MS. KLEA:** Yes, I did send a copy with my
19 petition. It's a --

20 **DR. BRANCHE:** Oh, it's with your petition,
21 okay.

22 **DR. ZIEMER:** Oh, with the petition, yes, yes --

23 **DR. BRANCHE:** I understand now. Thank you.

24 **DR. ZIEMER:** Yes, okay, we thought this was
25 something more recent. Okay, thank you very

1 much for clarifying that.

2 Board members, again, any comments or questions
3 on Texas City Chemicals (sic)?

4 (No responses)

5 **CONGRESSIONAL LETTERS**

6 Okay. Now a couple of letters we want to move
7 ahead on.

8 **DR. BRANCHE:** Jason.

9 **DR. ZIEMER:** Jason has a couple of letters I
10 think to read into the record regarding various
11 sites. Jason, what, two Congressional letters?

12 **MR. BROEHM:** Yes, two of these that I got last
13 night from Senator Schumer's office.

14 **DR. ZIEMER:** Okay.

15 **MR. BROEHM:** The first one is on Linde
16 Ceramics.

17 (Reading) Many thanks again to the Board for
18 affording me this opportunity to discuss Linde
19 Ceramics' application to have an extended time
20 frame at their site added to the Special
21 Exposure Cohort. I understand that these
22 meetings are very long and I appreciate how
23 accommodating the Board has been in allowing me
24 to offer my support for this important
25 allocation.

1 I'm extremely supportive of the Linde SEC
2 petition, and I respectfully urge you to
3 recommend adding the extended time period at
4 this facility to the SEC. The Linde Ceramics
5 facility, located in Tonawanda, New York,
6 produced fuel for the Department of Energy for
7 years. In the process, many employees, both
8 during those years and in the residual period,
9 were exposed to toxic and radioactive uranium.
10 The site profile for this facility does not
11 adequately take into account a number of
12 factors, and there is strong reason to believe
13 that it will underestimate applicants' exposure
14 and thus the probability of causation. To risk
15 uniformly and consistently underestimating the
16 probability of causation at a site violates the
17 statutory requirement of a claimant-favor--
18 claimant-friendly process. In a case such as
19 this, it is imperative that the Board
20 acknowledge the shortcomings of the available
21 information and recommend adding the site and
22 time in question to the SEC, especially in
23 light of the fact that there is already a class
24 of the SEC at this site.
25 It is readily apparent to me and to many of my

1 colleagues that there is simply a paucity of
2 reliable information for this location. It is
3 unacceptable to delay adding these other time
4 periods to the SEC as well.

5 Our country built its nuclear arsenal, and with
6 it our global dominance, on the backs of Linde
7 Ceramics plant -- plant's workers. And
8 everything that our government has done to
9 these men and women, after everything that they
10 sacrificed for our continued safety, the --
11 deserve compensation for their illnesses.

12 Again, thank you for allowing me to submit
13 testimony for your consideration. I
14 respectfully request that you recommend
15 granting this petition, and I thank you for
16 your time and consideration.

17 And the second letter, also from Senator
18 Schumer, is relating to the Bethlehem Steel SEC
19 petition.

20 (Reading) Thank you for allowing me the
21 opportunity to address the Board again on the
22 important issue of the application for
23 admission to the Special Exposure Cohort for
24 Bethlehem Steel, located in Lackawanna, New
25 York. As you all know, I have been strongly

1 advocating the creation of a class in the
2 Special Exposure Cohort for Bethlehem Steel for
3 several years now.

4 The veterans of this facility are sick, and
5 unfortunately, many are dying. We owe it to
6 them to recognize their service with admission
7 to the SEC.

8 Today members of the Bethlehem Steel Action
9 Group are here advocating for the site's
10 admission to the SEC. I am very impressed by
11 their tenacity and the self-sacrifice of their
12 members in coming all the way from Lackawanna,
13 New York. I hope that I and all of my
14 colleagues in Congress who are supporting this
15 application are able to live up to the high
16 standard that these wonderful activists have
17 set.

18 In constructing a site profile for Bethlehem
19 Steel, NIOSH relied very heavily on data from
20 Simonds Saw -- Simonds Steel in Lockport, New
21 York to fill in the gaps in the available data
22 for Bethlehem. In the years since the site
23 profile was completed it has become apparent
24 that the use of surrogate data in Bethlehem's
25 site profile is much higher than in most other

1 profiles. Furthermore, the accuracy of the
2 comparison between Bethlehem and Simonds has
3 been challenged time and again by former
4 workers.

5 In light of all the unknown variables at this
6 site, I think it is only reasonable for the
7 Board to acknowledge that the available data
8 are not sufficient to create a workable profile
9 that can live up to the statutory mandate of a,
10 quote, claimant-friendly, unquote, assessment.
11 The SEC is the only appropriate course of
12 action in such a case. Its broad reach is the
13 only tool that will guarantee former workers of
14 Bethlehem Steel receive the claimant-friendly
15 process that Congress has rightly deemed them
16 to deserve. Please recommend adding a class to
17 the SEC for this site as quickly as is
18 reasonably possible.

19 The men and women who worked for Bethlehem
20 Steel manufacturing fuel for the nation's
21 nuclear weapons are truly veterans of America's
22 brutal Cold War. Their sacrifices in building
23 our nuclear arsenal created our country's best
24 (unintelligible) work against armed conflict
25 with Soviet Russia, and surely saved thousands

1 upon thousands of lives. These heroes deserve
2 our gratitude and rightful compensation.
3 With so many of these veterans aging and ill,
4 it is imperative that this be done as quickly
5 as possible.

6 Again, thank you for the chance to address you
7 again today, and thank you for the careful
8 consideration you give to this and all of the
9 petitions you consider.

10 **DR. ZIEMER:** Thank you, Jason. Yesterday
11 during the public comment period we had a
12 comment by phone from [Identifying Information
13 Redacted], Nevada Test Site, concerning a
14 letter which he had but which Board members did
15 not have. But that letter now will be made
16 available to us, at least verbally.

17 Larry, are you prepared to provide -- this is a
18 -- well, Larry, you describe the letter and --

19 **MR. ELLIOTT:** I hope this is the letter you
20 want to have read into the record. This is a
21 letter from Mr. -- or from Patricia Worthington
22 at DOE to Mr. Pete Turcic at DOL.

23 (Reading) Dear Mr. Turcic -- and it's dated
24 June 2nd, 2008. Mr. Turcic, this is in
25 response to your letter of November 6, 2007

1 requesting information related to the Nevada
2 Test Site, specifically Area 51. You stated in
3 our response -- you stated our response will
4 assist the Department of Labor in addressing
5 questions related to the proposed Special
6 Exposure Cohort under the Energy Employees
7 Occupational Illness Compensation Program Act
8 for former workers of Area 51. Your letter
9 purports to extend coverage of the EEOICPA
10 benefits to workers of Area 51 in Nevada.
11 The referenced area is one that has
12 historically been part of NTS. In 1958, under
13 Public Land Order 1662, approximately 38,000
14 acres, or 60 square miles of land, was
15 administratively withdrawn by the Department of
16 Interior for the use by the Atomic Energy
17 Commission as part of its NTS. Following its
18 designation as part of NTS, the area was then
19 referred to as Area 51.
20 At some point during its usage by AEC -- see
21 the enclosed letter dated October 2nd, 1991 --
22 from 1958 until 1999 when land was
23 legislatively withdrawn for the use of
24 Department of Defense under the Military Lands
25 Withdrawal Act of 1999, Public Law 106-65, the

1 land was under jurisdiction of AEC and its
2 successors, the Energy Research and Development
3 Agency, and later the Department of Energy.
4 During the period of AEC stewardship of the
5 land it was used for at least one above-ground
6 nuclear safety experiment by AEC. Subsequent
7 environmental characterization activities, as
8 well as continuing maintenance of utilities,
9 were also undertaken by our agency. In
10 general, DOE did not pursue any further
11 mission-associated activities in that area. It
12 is our understanding, however, that other
13 federal agencies did utilize that property.
14 With respect to AEC and its successor --
15 successor's contractor employees, to the extent
16 that those claimants reference having worked at
17 Area 51, that would signify they had worked at
18 NTS.

19 It is important to note that AEC and its
20 successors utilized a unique management and
21 operating contractor paradigm at its sites,
22 whereby those management and operating
23 contractors existed solely to undertake
24 implementation of that specific AEC contract
25 and were not allowed to enter into separate

1 contracts with other parties. Both the
2 Reynolds Electric -- Electrical Engineering
3 Company, and later, in 1990s, Bechtel Nevada,
4 Incorporated, were such captive contractors
5 which managed operations across NTS. Thus an
6 NTS worker who was an employee of these
7 entities necessarily accomplished such work
8 for, or on behalf of, its contract with AEC or
9 its successors.

10 To the extent that NTS subcontractors were
11 employed as a result of a subcontract with
12 those management and operating contractors,
13 their employees would similarly have conducted
14 work done under or on behalf of the AEC
15 contract.

16 It should be noted that AEC and its successors
17 also had prime contracts with other entities
18 for conduct of its NTS activities, including
19 EG&G; Energy Measurements, Incorporated; Holmes
20 and Narver, Incorporated; and Wackenhut
21 Services, Incorporated, among others.

22 As with all mission activities and contracts
23 with DOE and its predecessors, there was
24 associated documentation evidencing such work
25 and related employment. Such documentation

1 would, of course, be subject to applicable
2 management under records retention and
3 destruction requirements, including those of
4 the general records schedule and any further
5 agency internal policies and guidance.
6 With respect to activities conducted by another
7 agency, however, any associated documents would
8 necessarily be owned and managed by that
9 agency. However, such documents would
10 presumably evidence work conducted by or on
11 behalf of that agency and not DOE or its
12 predecessors.
13 Nevertheless, workers accessing the area
14 through NTS would have been subject to NTS
15 requirements. Thus they would have had NTS
16 badges and dosimeters.
17 We hope this information has provided further
18 clarification relevant to your needs. Should
19 you have any additional questions or concerns,
20 please contact me -- and it provides a number.
21 Sincerely, Patricia R. Worthington, Ph.D.;
22 Director, Office of Health and Safety -- Office
23 of Health, Safety and Security.
24 **DR. ZIEMER:** Thank you, Larry. I'm not sure
25 what that clarified for me, but could you, in a

1 sentence or two, tell us what the impact of
2 this is on any of our previous actions relative
3 to that site or to NIOSH's actions relative to
4 that site?

5 **MR. ELLIOTT:** Well, the salient points here are
6 two, in my opinion. One, Area 51 is part --
7 considered part of the Nevada Test Site during
8 those years quoted in this letter. And two,
9 the individuals who would access Area 51 would
10 have been badged by the contractors at the
11 site.

12 We know that we have claims, we have processed
13 claims which had reported in their interviews
14 that they did move into Area 51 and back out,
15 and we have badge data for those individuals.
16 To answer your other question, however, going
17 to what this means toward the class that's been
18 added at Nevada Test Site, we'll have to
19 evaluate the period and the activities that
20 were conducted in Area 51 against that class,
21 and I think we'll have to report back --

22 **DR. ZIEMER:** Right, and if --

23 **MR. ELLIOTT:** -- perhaps we'll have to do an
24 addendum to our evaluation report.

25 Additionally I think DOL will have to look at

1 maybe addit-- claimants that may have been -- I
2 have to leave that to DOL. I don't know
3 exactly what it means for them.

4 **DR. ZIEMER:** That gives me a feel at least for
5 -- so we will await -- if something -- if you
6 identify such issues, we will await then your
7 actions on that. Thank you.

8 **SUBCOMMITTEE, WORK GROUP REPORTS**

9 I want to move quickly to the updates from the
10 other subcommittees -- or other workgroups,
11 rather. And we're not going to take workgroup
12 reports from those workgroups that have already
13 reported in this meeting, which are quite a
14 number. But while we're doing this, I wanted
15 to call attention to a draft which was
16 distributed to you earlier in the week called
17 "workgroup responsibilities", and you may
18 recall that at our phone meeting -- which was -
19 - well, whenever our last phone meeting was --

20 **DR. BRANCHE:** May 2nd.

21 **DR. ZIEMER:** -- I indicated to you that the
22 head of NIOSH had requested that all of our
23 workgroups have specific responsibilities
24 identified and that we place this information
25 on the web site. I did ask that all of the

1 workgroup chairs provide me with information on
2 what they thought their responsibilities were,
3 since in most cases we hadn't actually spelled
4 them out in detail. That is, we didn't --
5 described for workgroups what their charge was
6 when they were -- when they were organized, but
7 in most cases there was not a formal
8 specification of their -- if you want to call
9 it charter, but more informally, their
10 responsibilities. And several of the chairs
11 did respond to that, although I must tell you
12 that most did not, which allowed the -- allowed
13 the Chair of the Board to go ahead and tell you
14 what your responsibilities are, and here they
15 are.

16 Now we're not going to go through these and
17 debate them. These are what they are. But I
18 will -- and this is called a draft, and I will
19 allow the workgroup chairs the prerogative of -
20 - of editorializing a bit, if you wish, before
21 this goes on the web site if you want to add
22 anything that you think is pertinent.

23 **DR. BRANCHE:** You don't have to --

24 **DR. ZIEMER:** These are broadly general. They
25 indicate cases where the workgroup is

1 responsible to, for example, review the site
2 profile, to review the SEC petitions, to work
3 with the contractor in resolving issues -- that
4 sort of thing. So in general, they are
5 somewhat generic, with specificity as needed
6 from site to site. But if you wish to make
7 changes, let me know, workgroup chairmen, and
8 we will send the final copy to be put on the
9 web site.

10 **MR. GRIFFON:** Paul, would it be possible to
11 send this electronically? We can redline --

12 **DR. ZIEMER:** I will --

13 **MR. GRIFFON:** There's only one thing I -- I
14 glance at it and see that Rocky Flats says
15 Nevada Test Site underneath it.

16 **DR. ZIEMER:** Yeah, that's -- that's --

17 **MR. GRIFFON:** It's just a cut --

18 **DR. ZIEMER:** -- because of our cut and paste
19 operation --

20 **MR. GRIFFON:** Yeah, right, right, but I mean --

21 **DR. ZIEMER:** -- probably, right. We don't want
22 to get those two mixed up, but I -- I will
23 commit to sending this out electronically when
24 I get back home. Thank you.

25 So with that, let's -- and Larry.

1 **MR. ELLIOTT:** Before you start on that, I would
2 just like to make one request. Since this will
3 go on the web site and there is at least one
4 working group here, I believe, that has
5 completed its charge, I think it's important
6 for us to -- when we post these on the web site
7 we take note of those individual workgroups who
8 have concluded their -- their efforts and the
9 charge has been complete, and note that with a
10 date.

11 **DR. ZIEMER:** Actually --

12 **MR. ELLIOTT:** And there's no --

13 **DR. ZIEMER:** -- each one of those is noted;
14 perhaps the date is not there and --

15 **MR. ELLIOTT:** The date is not there.

16 **DR. ZIEMER:** -- and the chairmen can help me
17 provide that date. But for example, Dr.
18 Lockey, yours --

19 **MR. ELLIOTT:** The example would be Special
20 Exposure Cohort petitions that did not qualify.

21 **DR. ZIEMER:** Yeah --

22 **MR. ELLIOTT:** It says completed, but I -- and I
23 think it'd be important to have a date.

24 **DR. ZIEMER:** Have a date.

25 **MR. ELLIOTT:** Yeah, and I can help with the

1 date if -- if the chair needs it.

2 **DR. LOCKEY:** Would you then note the date that
3 was?

4 **MR. ELLIOTT:** Yes, I will.

5 **DR. LOCKEY:** I'd appreciate it.

6 **DR. ZIEMER:** Thank you. So noted.

7 **DR. BRANCHE:** You could let me know, too. That
8 would help.

9 **DR. ZIEMER:** So noted. Thank you.

10 **DR. BRANCHE:** You ready?

11 **DR. ZIEMER:** Yeah.

12 **DR. BRANCHE:** Fernald site profile and Special
13 Exposure Cohort petition; Mr. Clawson, chair.

14 **MR. CLAWSON:** We've had two meetings. We've
15 asked SC&A to do several things and we've got -
16 - NIOSH is working on some things. We're
17 looking at setting back up another workgroup
18 meeting in the next two to three weeks.
19 Everything is proceeding on and we're working
20 issues out as we go.

21 **DR. BRANCHE:** Hanford site profile and Special
22 Exposure Cohort petition. Dr. Melius is the
23 chair, but there are other workgroup members
24 who are here. Can they provide an update?

25 **DR. ZIEMER:** That workgroup has not met since

1 our last meeting, so there is nothing further
2 to report. I think there --

3 **MR. CLAWSON:** Right, we --

4 **DR. ZIEMER:** Oh --

5 **MR. CLAWSON:** -- we did -- at that one meeting
6 we selected a certain area that we had that was
7 called out for a SEC that was accepted, and
8 went from there. It was certain years.

9 **DR. BRANCHE:** Los Alamos National Laboratory
10 site profile and Special Exposure Cohort
11 petition; Mr. Griffon, chair.

12 **MR. GRIFFON:** Los Alamos is -- at this point I
13 think -- I don't know if LaVon is still here,
14 but I think we're still on course for probably
15 having a workgroup meeting set for early in the
16 fall of this year, 2008. We're waiting for a
17 revised site profile, I believe, and -- and
18 maybe a -- LaVon -- you might even gi-- okay.
19 Anyway, that's where we stand. We haven't met
20 since the last meeting, but we expect in the
21 fall to have -- start on the process.

22 **DR. BRANCHE:** Linde Ceramics site profile?

23 **DR. ROESSLER:** Our assignment was to carry out
24 a review of the site profile, along with NIOSH
25 and SC&A. We had a first meeting in March of

1 2007. SC&A identified around 22 issues.
2 Throughout the year we have worked through
3 those. We had one issue that was still
4 outstanding. We met on Monday and we took care
5 of that issue. NIOSH and SC&A agreed on the
6 approach. The workgroup -- we decided that we
7 have fulfilled our charge, and at this point
8 I'd like to move that the Board accept our
9 report.

10 **DR. ZIEMER:** And your -- your motion -- this
11 comes as a recommendation from your workgroup,
12 as I understand it, that the workgroup agrees
13 that --

14 **DR. ROESSLER:** The workgroup agreed that we had
15 fulfilled our assignment and that every -- that
16 NIOSH --

17 **DR. ZIEMER:** That all the issues of the --

18 **DR. ROESSLER:** All the issues were --

19 **DR. ZIEMER:** -- site profile have been
20 resolved?

21 **DR. ROESSLER:** Right.

22 **DR. ZIEMER:** Okay. This -- this is not a
23 recommendation to send anything to the
24 Secretary or --

25 **DR. ROESSLER:** No, we just completed --

1 (No responses)

2 Motion carries. Thank you very much, and we
3 can consider the work -- Larry, you have a
4 comment then?

5 **MR. ELLIOTT:** I was just going to ask, is this
6 workgroup's efforts completed then --

7 **DR. ZIEMER:** Yes, and --

8 **MR. ELLIOTT:** -- and would I note today as the
9 date --

10 **DR. ZIEMER:** -- as of today, completed.

11 **DR. BRANCHE:** We did Nevada Test Site
12 yesterday. Pinellas Special Exposure Cohort
13 petition; Mr. Schofield, chair.

14 **MR. SCHOFIELD:** We've had our first meeting.
15 There's a few outstanding issues.
16 Unfortunately they could have got scrubbed off
17 my hard drive so I've got to get those
18 recovered. But once those issues are settled
19 by -- we get a report back from SC&A, then
20 we'll schedule another meeting.

21 **DR. BRANCHE:** Savannah River Test Site profile
22 -- sorry, Savannah River site profile; Mr.
23 Griffon, chair.

24 **MR. GRIFFON:** Savannah River has no update at
25 this point since the last meeting.

1 **DR. BRANCHE:** Special Exposure Cohort issues
2 group, including 250-day issue and preliminary
3 review of 83.14 SEC petition; Dr. Melius,
4 chair, but other member -- all other members of
5 the workgroup are here.

6 **DR. ZIEMER:** Well, I can report that the
7 workgroup has not met since our last meeting so
8 there's no additional update to report.

9 **DR. BRANCHE:** Subcommittee on dose
10 reconstruction; Mr. Griffon, chair.

11 **MR. GRIFFON:** The subcommittee -- yeah, we --
12 we had a meeting on the 6th set and the 7th set
13 of cases in Cincinnati. We went through -- we
14 have -- I think we're very close to closure on
15 almost all issues on the 6th set of cases --
16 I'm trying to remember. I'm sorry, I should
17 have pre-- prepared more for this report. The
18 7th set was a -- a -- more of a preliminary
19 run-through of the findings. Although, as you
20 might imagine, we do have a lot of overlap with
21 some findings from past cases, so we actually
22 were able to get through -- I -- I think we got
23 al-- we might not have made it through the
24 entire 7th set of cases, but we put in a good
25 solid 9:00 to 5:00 day on these -- on these

1 findings.

2 I -- I still -- I still -- the subcommittee
3 still has to produce a first-100-cases report.
4 We -- we have not run through that yet. I plan
5 to -- to have that for the next subcommittee
6 meeting, for discussion, to bring back to the
7 full Board.

8 And I think, Dr. Ziemer, we have a letter that
9 -- I just gave you some final edits for the
10 last review of the 4th and 5th set to get that
11 finally out to the Secretary, I believe. We
12 already voted and approved it --

13 **DR. ZIEMER:** The letter to --

14 **MR. GRIFFON:** Yeah.

15 **DR. ZIEMER:** -- the Secretary summarizing the
16 results of cases six-- 61 through 100 --

17 **MR. GRIFFON:** Right.

18 **DR. ZIEMER:** -- was approved by the Board at
19 our last meeting, subject to some polishing of
20 the presentation and some numbers that NIOSH
21 had to provide us for the report. And we now
22 have those and that should be ready to go in
23 within the next week or so.

24 **MR. GRIFFON:** Yeah.

25 **DR. BRANCHE:** Use of --

1 **MR. GRIFFON:** And I think that's --

2 **DR. BRANCHE:** I'm sorry.

3 **MR. GRIFFON:** I'm sorry. That's all I have to
4 report. Sorry.

5 **DR. BRANCHE:** Sorry. Use of surrogate data;
6 Dr. Melius, chair, but all other workgroup
7 members are here.

8 **MR. GRIFFON:** As I recall, we did have a -- a
9 phone meeting, didn't we? Yeah, we had one
10 phone meeting, and I'm not sure where we --
11 where we left things, but we had an initial
12 draft -- right? -- to -- and I think Jim was
13 going to incorporate some comments from that
14 call, and some written comments that Wanda had
15 provided, and revise the draft and send it to
16 the workgroup again for a possible follow-up
17 phone meeting, yeah, so --

18 **DR. LOCKEY:** That's correct.

19 **MR. GRIFFON:** -- we're moving ahead past the
20 first draft.

21 **DR. BRANCHE:** Last but not least, worker
22 outreach; Mr. Gibson, chair.

23 **MR. GIBSON:** We have not met since the last
24 meeting. OCAS is continuing to work on and
25 making progress on their new procedure and the

1 database to capture the information from worker
2 comments, and we'll probably meet -- I would
3 hope before the next Board meeting -- and have
4 some response then.

5 **MS. BEACH:** Dr. Branche, you didn't call on
6 Mound, but we --

7 **DR. BRANCHE:** I didn't call Mound?

8 **MS. BEACH:** No --

9 **DR. BRANCHE:** Forgive me.

10 **MS. BEACH:** That's okay. We have --

11 **DR. BRANCHE:** Ms. Beach, chair.

12 **MS. BEACH:** We have not had a workgroup meeting
13 since our first one in April, although we do
14 have a scheduled meeting at this time for July
15 14th in Cincinnati.

16 **DR. BRANCHE:** Forgive me, I got so caught up
17 with Linde -- I'm sorry, Josie.

18 **MS. BEACH:** That's okay.

19 **DR. ZIEMER:** Okay, thank you very much. You
20 have at your places copies of the official
21 wording of the two petitions that were acted
22 on, the Y-12 petition and the Spencer Chemical
23 Company petition. I would be pleased to have
24 any editorial comments you may wish to make.
25 Let me point out a couple of corrections at

1 this moment.

2 On the Y-12 petition, bullet number four, at
3 the end of the line -- second line there should
4 be a period rather than a comma.

5 **DR. BRANCHE:** That's for Y-12?

6 **DR. ZIEMER:** That's for Y-12, end of the --
7 fourth bullet, end of the second line.

8 **DR. BRANCHE:** End of the second line.

9 **DR. ZIEMER:** There should be a period rather
10 than a comma.

11 And then if you turn the page over, the very
12 last paragraph, talking about this -- today's
13 Board meeting, that should be 2008 instead of
14 2005.

15 Likewise on the Spencer Chemical Company --
16 clearly I was using the same template, but last
17 paragraph of the Spencer should indicate the
18 current date, 2008 rather than 2005.

19 I've asked Larry to look at the descriptions of
20 the -- of the class in both of these cases and
21 he's agreed that they are in accordance with
22 the class, as described by NIOSH.

23 Do I need to read these formally into the
24 record or can I -- can we agree simply to
25 provide copies to the court reporter and ask

1 him to incorporate them into the record? Can
2 we do that for -- to expedite?

3 **THE COURT REPORTER:** Is that okay with you?

4 **DR. BRANCHE:** Yeah, that's why I handed it to
5 you.

6 (Whereupon, the exact wording of the referenced
7 motions is attached hereto:)

8 Y-12 Petition

9 The Board recommends that the following letter
10 be transmitted to the Secretary of DHHS within 21
11 days. Should the Chair become aware of any issue
12 that, in his judgment, would preclude the transmittal
13 of this letter within that time period, the Board
14 requests that he promptly inform the Board of the
15 delay and the reasons for this delay and that he
16 immediately work with NIOSH to schedule an emergency
17 meeting of the Board to discuss this issue.

18 The Advisory Board on Radiation and Worker
19 Health (The Board) has evaluated SEC Petition-00098
20 under the statutory requirements established by
21 EEOICPA and incorporated into 42 CFR Sec. 83.13(c)(1)
22 and 42 CFR Sec. 83.13(c)(3). The Board respectfully
23 recommends Special Exposure Cohort status be accorded
24 to all employees of the Department of Energy (DOE),
25 its predecessor agencies, and DOE contractors and

1 subcontractors who worked at the Y-12 Plant in Oak
2 Ridge, Tennessee from March 1, 1943 through December
3 31, 1947 for a number of work days aggregating at
4 least 250 work days, occurring either solely under
5 this employment, or in combination with work days
6 within the parameters established for other classes
7 of employees in the Special Exposure Cohort. This
8 recommendation is based on the following factors:

9 The Y-12 facility during this time period was
10 one of the earliest sites involved in the
11 production of nuclear weapons and was
12 constructed and operated during a time when
13 radiation control and monitoring methods were
14 still being developed.

15 Monitoring data as well as information on
16 sources of radiation exposures and process
17 information are insufficient for adequate
18 individual dose reconstruction for the time
19 period involved. In particular, information
20 needed for dose reconstruction on the calutron
21 operations, an important source of exposure, is
22 incomplete.

23 A number of other radiological operations
24 occurred at the Y-12 plant, and NIOSH does not
25 have information that clearly describes all the

1 buildings where radiological operations
2 occurred. Consequently, NIOSH is unable to
3 determine if any specific group of employees
4 was not potentially exposed to ionizing
5 radiation.

6 Only a limited number of individual bioassay
7 samples are available and NIOSH has concluded
8 that available data are too limited to support
9 internal dose reconstruction. Although some
10 air monitoring data are available, not enough
11 is known about those samples to support dose
12 reconstruction.

13 NIOSH has not located any individual external
14 monitoring results. In addition, NIOSH has not
15 obtained any individual external monitoring
16 data for this period and lacks source-term
17 information about non-uranium radiological
18 operations.

19 In its evaluation report, NIOSH has concluded
20 that it is likely that radiation doses for this
21 group of workers at Y-12 Plant during this time
22 period could have endangered the health of
23 members of this class. The Board concurs. The
24 Board also notes that NIOSH is able to

1 reconstruct doses from medical X-rays by means
2 of existing project technical documents.
3 Based on these considerations, and on the
4 discussions and deliberations at our June 24-
5 26, 2008 Board meeting, the Board recommends
6 that this Special Exposure Cohort petition be
7 granted.

8 Enclosed is supporting documentation from the
9 Advisory Board Meeting held June 24-26, 2008 in
10 St. Louis, Missouri. This documentation
11 includes transcripts of the deliberations,
12 copies of the petition and the NIOSH review
13 thereof, and related documents distributed by
14 NIOSH. If any of these items are unavailable
15 at this time, they will follow shortly.

16 Spencer Chemical Co.

17 The Board recommends that the following letter
18 be transmitted to the Secretary of DHHS within 21
19 days. Should the Chair become aware of any issue
20 that, in his judgment, would preclude the transmittal
21 of this letter within that time period, the Board
22 requests that he promptly inform the Board of the
23 delay and the reasons for this delay and that he
24 immediately work with NIOSH to schedule an emergency
25 meeting of the Board to discuss this issue.

1 The Advisory Board on Radiation and Worker
2 Health (The Board) has evaluated SEC Petition-00089
3 under the statutory requirements established by
4 EEOICPA and incorporated into 42 CFR Sec. 83.13(c)(1)
5 and 42 CFR Sec. 83.13(c)(3). The Board respectfully
6 recommends Special Exposure Cohort status be accorded
7 to all Atomic Weapons Employer employees of the
8 Spencer Chemical Company/Jayhawk Works from January
9 1, 1956 through December 31, 1961 for a number of
10 work days aggregating at least 250 work days,
11 occurring either solely under this employment, or in
12 combination with work days within the parameters
13 established for other classes of employees in the
14 Special Exposure Cohort. This recommendation is
15 based on the following factors:

16 Spencer Chemical Company/Jayhawk Works
17 conducted chemical processes to produce uranium
18 and thorium oxides and uranium carbides from
19 other forms, including uranium hexafluoride.
20 Physical forms of the material at the site
21 included fused ceramic pellets and finely
22 divided powder.

23 The facility processed several types of uranium
24 bearing materials for use in the nuclear fuel
25 cycle, including dissolution and purification

1 of metal scrap to recover uranium oxide; and
2 hydrolyzation and purification of scrap uranium
3 hexafluoride to recover uranium oxide. NIOSH
4 does not have information about the nature of
5 the thorium operations at the plant.
6 Although documents from the period indicate the
7 individuals were on a bioassay program, no
8 individual bioassay records have been located.
9 Although documents from the period indicate
10 that workers wore dosimeters, no dosimetry
11 records have been discovered other than a
12 single record for one individual. The lack of
13 external monitoring records prevents NIOSH from
14 reconstructing total external dose, although
15 doses from uranium can be reconstructed from
16 project technical documents by means of the
17 procedures set forth in NIOSH Technical
18 Bulletin TBD-6000.
19 Although documents from the period indicate
20 that air monitoring, radiation surveys, and
21 contamination surveys were conducted, results
22 from such surveys have not been located.
23 The lack of information on thorium operations
24 prevents NIOSH from reconstructing doses from
25 thorium.

1 In its evaluation report, NIOSH has concluded
2 that it is likely that radiation doses for this
3 group of workers at Spencer Chemical Co. during
4 this time period could have endangered the
5 health of members of this class. The Board
6 concur. The Board also notes that NIOSH is
7 able to reconstruct doses from medical X-rays
8 by means of existing project technical
9 documents.

10 Based on these considerations, and on the
11 discussions and deliberations at our June 24-
12 26, 2008 Board meeting, the Board recommends
13 that this Special Exposure Cohort petition be
14 granted.

15 Enclosed is supporting documentation from the
16 Advisory Board Meeting held June 24-26, 2008 in
17 St. Louis, Missouri. This documentation
18 includes transcripts of the deliberations,
19 copies of the petition and the NIOSH review
20 thereof, and related documents distributed by
21 NIOSH. If any of these items are unavailable
22 at this time, they will follow shortly.

23 **DR. ZIEMER:** Are there any other very obvious
24 editorial changes anyone wishes to make at this
25 time on these? Otherwise, let me know. We

1 have -- in the next couple of weeks before I
2 send it. Actually I will distribute the -- the
3 draft letters to you, as I normally do, so
4 you'll have another chance to look at them --
5 the draft letter to the Secretary -- or
6 letters.

7 I want to move on to the Dow -- Dow Madison
8 planning. We have a couple of issues before
9 us. One was the issue of assigning tasks to
10 our -- to our contractor. The other was
11 involving a workgroup. I have gone back and
12 checked our minutes from the meet-- the meeting
13 in -- what's the date here on this meeting --
14 it's the -- it's the January meeting when this
15 was discussed. And at that time -- and I think
16 Dr. McKeel's memory was correct; he said he
17 thought it had been assigned to the -- to the
18 Melius workgroup on -- actually it was the --

19 **MR. GRIFFON:** The SEC workgroup, right?

20 **DR. ZIEMER:** It was the SEC workgroup, not --
21 not the -- not the workgroup on surrogate data.
22 It was the SEC workgroup.

23 **DR. MCKEEL:** (Off microphone) (Unintelligible)
24 never went to the surrogate data
25 (unintelligible).

1 **MR. GRIFFON:** Right.

2 **DR. ZIEMER:** And Dr. Melius had volunteered to
3 sort of monitor what was going on there, and so
4 I'm going to confirm that that's where --
5 that's where this activity will continue to
6 reside and to charge that workgroup with
7 monitoring activities related to Dow Madison.
8 Now the other part of this was to define a path
9 forward, and also to determine whether
10 additional tasking was needed for the workgroup
11 relative to the petition. I'd like to
12 basically ask the Board members if you have
13 recommendations on the path forward and the
14 issues that you believe should be addressed by
15 the workgroup, and possibly with the assistance
16 of the -- the Board's contractor.

17 **MR. GRIFFON:** Yeah, I -- I think my -- the
18 issue I presented yesterday -- I mean was the
19 primary one I can think of, I -- other people
20 may have other views, but the model for thorium
21 and thoron during the residual period is -- is
22 my -- the main issue I think that the workgroup
23 should take, you know, to -- to review.
24 Whether we need contractor support on that is
25 another question, but...

1 **DR. ZIEMER:** Okay. And Jim?

2 **DR. LOCKEY:** Didn't that revolve about TIB-90,
3 a technical document?

4 **MR. GRIFFON:** It did have a TIB, TIB-70, I
5 thought.

6 **DR. LOCKEY:** TIB-70, and that, to me --

7 **MR. GRIFFON:** TIB-70, yeah.

8 **DR. LOCKEY:** -- I think that was -- that was
9 what we were going to -- whether we need to get
10 -- put together a separate workgroup to deal
11 with TIB-70. I think that's what the issue
12 resolved (sic) around.

13 **DR. ZIEMER:** TIB -- TIB-70 itself currently
14 would fall under the procedures workgroup as a
15 responsibility, and John, can you remind me
16 whether or not TIB-70 has already been reviewed
17 by --

18 **DR. MAURO:** No.

19 **DR. ZIEMER:** It has not been reviewed --

20 **DR. MAURO:** It's not on the list for review and
21 it has not been reviewed.

22 **MR. GRIFFON:** They haven't been tasked with
23 that.

24 **DR. ZIEMER:** All right.

25 **MR. GRIFFON:** So whether we want to -- I mean

1 we should probably decide it, I --

2 **DR. ZIEMER:** Well --

3 **MR. GRIFFON:** -- if we need to split that off
4 into procedures and -- and...

5 **DR. ZIEMER:** Well, in the interest of time,
6 rather than -- than wait for the workgroup to
7 sort of decide that, it seems to me -- it
8 certainly seems to the Chair that we've got to
9 have the TIB-70 review regardless, and so I'm
10 wondering if -- if it would be in order to task
11 our -- our contractor to initiate that review
12 and then, when it is completed, for the
13 workgroup to pick that up and -- in a somewhat
14 expedited way, realizing that --

15 **MR. GRIFFON:** That's the -- yeah.

16 **DR. ZIEMER:** -- we have -- we have this issue.
17 But I -- I think that will be a little sort of
18 easier to handle than the broad 6000/6001
19 issues that -- that you now have given up. So
20 the trade-off is that you would get this
21 somewhat lesser task, I guess I'd describe it.
22 Is there -- is there any objection to tasking -
23 - and we would ask Christine, working with
24 David Staudt, to make that tasking happen.

25 **DR. MCKEEL:** Well, may I make a comment --

1 **DR. ZIEMER:** You certainly may.

2 **DR. MCKEEL:** -- about tasking of the
3 contractor? Just to refresh, SC&A did file a
4 report on the initial NIOSH evaluation report.

5 **DR. ZIEMER:** That's correct.

6 **DR. MCKEEL:** But they did not -- and in that
7 report, interestingly, they did evaluate worker
8 testimony that covered the residual period.
9 And they really did provide some very valuable
10 kind of independent assessment of what the
11 workers said about the activities that went on
12 there and -- and what I characterize as at
13 least evidence that the thorium operations
14 period continued on much longer than the
15 uranium operations, and then what kind of
16 activities were going on during the residual
17 period. But what they did not do was to look
18 at thorium calculation of internal and external
19 doses in any form or way.

20 Then evaluation -- the addendum one came out
21 from NIOSH and of course this month the
22 addendum two, and I would just ask please for
23 the Board to think about, along with TIB-70,
24 that -- you know, my -- my question yesterday,
25 what I tried to focus on, was whether the data

1 used for the air intakes and -- and general air
2 samples and the breathing zone samples are
3 really appropriately -- appropriate samples to
4 apply to Dow Madison and -- and just the
5 general way that NIOSH proposes that now they
6 can calculate those doses but they couldn't
7 before. I just think it leaves it very
8 incomplete unless the contractor also looks at
9 that question.

10 **DR. ZIEMER:** Thank you for --

11 **DR. MCKEEL:** It's just a comment.

12 **DR. ZIEMER:** -- that suggestion. Jim?

13 **DR. LOCKEY:** John, yesterday we were -- since
14 TIB-70 is used in a lot of different -- it's
15 not just for this, it's going to be used
16 throughout -- I think we were -- we really
17 wanted that looked at, and how soon can you get
18 that done? How -- how fast can you move that
19 up in your agenda?

20 **DR. MAURO:** We -- we could start working on it
21 immediately, but I have to give it a read. I
22 haven't read it. I don't know how complex it
23 is, and so it's hard for me to say how long
24 it's going to take to review. If you -- I
25 could -- I just want to read -- give -- read it

1 cover to cover, get my mind around the problem
2 and the right people to do the evaluation. I
3 could get back to you in a matter of days with
4 an answer to your question of when I might be
5 able to have a report --

6 **DR. LOCKEY:** I think that --

7 **DR. MAURO:** -- into your hands.

8 **DR. LOCKEY:** -- would be helpful for the Board
9 to --

10 **DR. MAURO:** Yeah, but I do --

11 **DR. LOCKEY:** We need to --

12 **DR. MAURO:** I haven't read it and I don't --

13 **DR. LOCKEY:** We need to keep the petitioners --
14 we need to keep this on the --

15 **DR. MAURO:** Yes.

16 **DR. LOCKEY:** -- on the front burner.

17 **DR. MAURO:** Yeah, so if you just give me a few
18 days just to read it and -- and I'm -- how best
19 -- how best to -- so just e-mail the Board with
20 my -- my --

21 **DR. BRANCHE:** Your estimated time.

22 **DR. MAURO:** -- prospective -- yeah.

23 **DR. ZIEMER:** Let's --

24 **DR. BRANCHE:** Yeah, I think that's --

25 **DR. ZIEMER:** Send -- send it to Christine and

1 we'll deter--

2 **DR. BRANCHE:** And then over to -- yeah.

3 **DR. ZIEMER:** -- we'll -- we'll get it to the
4 Board, but I think -- just communicate --

5 **DR. BRANCHE:** I'll confer with Dr. Ziemer when
6 you send your estimated time to me.

7 **DR. ZIEMER:** And then we'll provide that
8 information for the workgroup and make sure the
9 Board is aware of it.

10 **DR. BRANCHE:** Dr. Ziemer --

11 **DR. ZIEMER:** Christine has a comment here.

12 **DR. BRANCHE:** Well, actually I have a question
13 to -- to you and to the rest of the Board
14 members. And I understand about how the issues
15 concerning the 250 days was assigned to the
16 appropriate workgroup. But Mr. Griffon raises
17 issues about modeling for thorium and thoride -
18 - I may not have all the technical names
19 correct -- correctly stated --

20 **DR. ZIEMER:** Thoron.

21 **DR. BRANCHE:** -- thoron -- thoron, thank you --
22 but I am concerned that that may not be
23 properly addressed by the 250-day workgroup, so
24 is that going to be lost?

25 **MR. GRIFFON:** Well, I --

1 **DR. BRANCHE:** Is that the appropriate place?

2 **MR. GRIFFON:** I mean I think it's -- the same
3 thing applies. It would have to be moved to
4 the front burner on that group. That -- I
5 think we -- we had an SEC/250-day workgroup --

6 **DR. BRANCHE:** Yes.

7 **MR. GRIFFON:** -- (unintelligible) --

8 **DR. ZIEMER:** The 250-day was --

9 **DR. BRANCHE:** Yeah, inclu--

10 **DR. ZIEMER:** -- one of their issues but not
11 their only issue.

12 **MR. GRIFFON:** Yeah.

13 **DR. ZIEMER:** In that sense it was a somewhat ad
14 hoc workgroup that was available --

15 **MR. GRIFFON:** Right.

16 **DR. ZIEMER:** -- and it may be --

17 **MR. GRIFFON:** That we need to --

18 **DR. ZIEMER:** -- that we would have to have a
19 full workgroup just addressing this. But
20 insofar as a lot of the -- you know, the -- the
21 Dow issues, many of them have been addressed.
22 We had the existing group already address -- it
23 may be that this -- this workgroup can handle
24 it, and they're not having to spend a lot of
25 time right now on the 250-day issue anyway, so

1 I think --

2 **MR. GRIFFON:** Right.

3 **DR. ZIEMER:** -- I think they're in a position
4 to -- to do the work.

5 **DR. BRANCHE:** And you're saying it's covered
6 because it's also actually primarily supposed
7 to be Special Exposure Cohort issues?

8 **DR. ZIEMER:** Yes.

9 **MR. GRIFFON:** Right. That was originally the
10 way we --

11 **DR. BRANCHE:** Well, we'll have to --

12 **MR. GRIFFON:** -- defined --

13 **DR. BRANCHE:** We'll have to monitor and see. I
14 mean I --

15 **MR. GRIFFON:** Yeah, yeah, yeah --

16 **DR. BRANCHE:** -- prove to me that that's
17 actually going to hap--

18 **DR. ZIEMER:** Right.

19 **DR. BRANCHE:** -- be properly addressed,
20 especially given that Dr. Melius isn't here.

21 **DR. ZIEMER:** But he -- he did volunteer to have
22 his --

23 **MR. GRIFFON:** Yeah, yeah.

24 **DR. ZIEMER:** -- his group monitor this
25 particular one at -- at the previous meeting,

1 so we give them the opportunity --

2 **MR. GRIFFON:** We'll certainly let him know and
3 notify --

4 **DR. ZIEMER:** -- and if -- if he believes that
5 they cannot do that, then we'll have to
6 reassign it or re-establish another workgroup.
7 Okay, so we have -- we have the -- I think we
8 have agreement that the tasking for the -- for
9 the procedure should be done. The -- Dr.
10 McKeel has raised some issues. I'd like to get
11 some feedback from Board members on that in
12 general. This would require some additional
13 tasking. Or we could await for the -- the
14 committee -- the workgroup itself to make their
15 preliminary evaluation and give them the auth--
16 authority to request from Christine that the
17 tasking be done. Any -- Jim, do you have a
18 comment on this or --

19 **DR. LOCKEY:** Oh, I'm sorry -- no.

20 **DR. ZIEMER:** I take the silence as being
21 uncertainty as to -- to what you think should
22 be tasked. Let me ask Christine a question
23 here -- and John, maybe also, you -- you might
24 not have a feel for this, but as we do tasking
25 is -- it's easy for us to sit here and do

1 tasking, but these things start to pile up and,
2 as one thing comes into play, something else
3 gets pushed down and so on. You -- you heard
4 what Dr. McKeel described, and are you in a
5 position right now to respond to that in terms
6 of whether that would entail significant time
7 and effort, to the extent that we're going to
8 be pushing other priority items back down?
9 Everything is fighting for priority, obviously.

10 **DR. MAURO:** No, in fact I would say that the --
11 since TIB-70 is generic, it would be efficient
12 to, while that person is reviewing TIB-70 -- or
13 team -- in terms of -- I presume it's some type
14 of model for -- for projecting exposures as a
15 function of time and extrapolation, and then
16 actually apply it and see how well it serves
17 the -- the Dow use of that model. So I mean it
18 would -- it would create a situation where we
19 could sort of move the two of them together and
20 actually make them linked, so -- so it -- it
21 will not affect our ability to continue work on
22 other fronts.

23 **DR. ZIEMER:** Thank you, that's helpful. Wanda?

24 **MS. MUNN:** Well, as chair of procedures, I have
25 to weigh in on this, too, and remind the Board

1 that the fact that SC&A can produce their
2 analysis means that they also are going to be
3 producing findings. And when they produce
4 findings, those findings must come to the
5 procedures group, and it involves the staff at
6 NIOSH at great length for us to work through
7 those findings, some of which we can work
8 through and some of which you reject even when
9 we bring the resolution to you. Therefore, our
10 concern -- or my concern, and the concern, I
11 hope, of the other members of the procedures
12 group -- is that -- first of all, somebody else
13 is talking on the line, and if they will get
14 off the line I will continue with what I'm
15 saying. It is a very -- borders on the
16 impossible for us to be able to say that the
17 working group is going to be able to get
18 through this in jig time.

19 One of the things we've been very concerned
20 about, which I brought to you earlier today and
21 -- not today, earlier this meeting -- is the
22 backlog of items, which may not loom great but
23 which are still awaiting any attention at all,
24 simply because we've been focused on other
25 things. One of the other generic procedures

1 that's on the front burner right now, I hope,
2 is Proc-90, which has absorbed at least three
3 of the other procedures that we were looking at
4 and which now needs the attention of both the
5 contractor and NIOSH in order to reach some
6 agreement on fine points that need to be
7 polished with that very large overarching
8 procedure.

9 So I'm not trying to discourage this, I'm just
10 trying to discourage the Board from putting
11 unrealistic expectations on the contractor with
12 respect to this single procedure. It's not
13 just the contractor's weight to bear.

14 **DR. ZIEMER:** Right, thank you for that comment.
15 In the case of the second part of this that you
16 were addressing, I -- I would think that the --
17 the workgroup -- the Dow -- Dow Madison group,
18 which is the 250-day SEC workgroup, would have
19 to address issues raised in the analysis of the
20 Dow situation versus the findings for -- for
21 the review of the procedures.

22 **DR. MAURO:** We have a very similar situation
23 with regard to Pinellas and OTIB-66, I believe,
24 whereby there's really -- the solution there
25 was let's, as part of the closeout process --

1 we have a Pinellas review. We have a list of
2 issues we're addressing. One of the issues
3 deal with a very specific subject that has now
4 been addressed globally by NIOSH in an OTIB --
5 66. And the judgment was made that as part of
6 the closeout process for that issue for
7 Pinellas, we will review that TIB as applied to
8 Pinellas. So we have a similar situation here.
9 The alternative of course could have been,
10 since it was a procedure we've never reviewed
11 before, it could have fell -- so in effect, the
12 review of OTIB-66 is part and parcel to the
13 review -- the closeout process for Pinellas. I
14 guess it's really the judgment of the Board.
15 We could do a -- do it -- a similar approach,
16 or -- whereby we would review OTIB-70 as part
17 of the -- the review of the Dow issue, but --
18 in this case of course tha-- this particular
19 aspect of the Dow review has not been
20 authorized --

21 **DR. ZIEMER:** Right.

22 **DR. MAURO:** -- so I mean -- but it -- we could
23 -- we could do it either way, as a separate
24 review, independent, and it would be a stand-
25 alone work product, which would be a review.

1 And then subsequent to that or in parallel with
2 that have a report, if you so choose, that
3 would basically expand our current review of
4 the Dow -- the 1957 to '60 time period and then
5 add onto that -- okay, now let's -- let's look
6 at the resid-- the period that follows. I mean
7 ei-- either approach could be used. It's
8 really your choice.

9 **DR. ZIEMER:** In my mind it's a parallel thing.
10 I think the procedures have to go to Wanda's
11 committee. I think the analysis of the Dow
12 situation has to go to the other group. And
13 obviously they're not being done in isolation,
14 but I don't think we want to ask the procedures
15 group to get involved specifically in the Dow
16 issues.

17 **MS. MUNN:** I would hope not.

18 **DR. ZIEMER:** So -- but it also seems to the
19 Chair that we -- we do need to task our
20 contractor to get underway with this, being
21 aware of all of the items and concerns that --
22 that Wanda has raised because they're concerns
23 not only for this task but for all of our
24 tasks. And also reminding petitioners and
25 others involved with them that this is a -- a

1 struggle that we have in terms of our own time
2 commitments and -- and meeting those. And I
3 know, Dan, you're aware of that 'cause you're -
4 - you're here at our meetings. So we're trying
5 to give priority, but also be fair to all of
6 the groups that are needing attention. So we
7 will -- will do the tasking for the contractor.
8 We have the -- the one workgroup getting
9 underway with the -- with the procedures that
10 are related, the other workgroup to address the
11 other issues, particularly the one that Mark
12 raised and other issues that they can certainly
13 identify based on the discussion that was had -
14 - that was held earlier in the meeting.
15 Josie?

16 **MS. BEACH:** And I -- sorry if I missed this --
17 did we task SC&A to look at the addendum one
18 and two of the Dow?

19 **DR. BRANCHE:** No. No, that has not -- that
20 task has not been assigned.

21 **MS. BEACH:** Is that a task that we can assign
22 at this time? SC&A looked at the original
23 document.

24 **DR. BRANCHE:** But not the two addenda.

25 **MS. BEACH:** But not the two addendums (sic).

1 **DR. ZIEMER:** That's correct. In my mind that
2 was sort of tied in with what we were talking
3 about here. I think --

4 **MS. BEACH:** I thought so, but I wanted to make
5 sure we were clear.

6 **DR. ZIEMER:** That was your understanding, I
7 assume, John, as well. Right?

8 **MR. GRIFFON:** There are more parts to those
9 addenda so I (unintelligible).

10 **MS. BEACH:** Yes.

11 **DR. MAURO:** My understanding right now is that
12 SC&A has been tasked to review 70, and I will
13 get back to you very shor-- shortly about how
14 long that will take.

15 Right now it sounds to me that -- we have not
16 been tasked to look at addendum one and two and
17 that approach for doing dose reconstruction
18 post-1960. We have not been tasked to do that
19 and that -- and certainly the two will -- are
20 inter-related and it --

21 **DR. BRANCHE:** They're related, but no
22 assignment has been made yet.

23 **DR. MAURO:** But right now we have not been
24 tasked to do that.

25 **MR. GRIFFON:** -- I thought we did, but

1 anyway...

2 **DR. ZIEMER:** Well --

3 **MS. BEACH:** It was not clear.

4 **DR. ZIEMER:** Okay, let's include that --

5 **DR. BRANCHE:** Let's make it clear.

6 **DR. ZIEMER:** -- include that, that's -- that's
7 what we're -- partially -- partially what we're
8 talking about when we're talking about that
9 analysis, including with -- including the
10 description that Dr. McKeel made there a moment
11 ago.

12 We don't have a specific time line -- I don't
13 think we can today. I think and I will state
14 for the record and for the petitioners, for
15 Robert, that we -- it is our intent to move
16 ahead on these as rapidly as we can.

17 **DR. BRANCHE:** Okay.

18 **DR. ZIEMER:** Okay.

19 **MR. GRIFFON:** (Off microphone) Can we
20 (unintelligible).

21 **DR. ZIEMER:** Huh?

22 **MR. GRIFFON:** I -- I know you're -- are we
23 almost close to the end or can we take a break?

24 **DR. ZIEMER:** I'm going to suggest that people -

25 -

1 **DR. BRANCHE:** Go as they need.

2 **DR. ZIEMER:** -- take their own comfort breaks
3 as their level of discomfort reaches a point --
4 we're -- we're very close to the end, but we
5 need to establish another workgroup and that is
6 to address the issues of -- of OTIB-6000 and
7 6001. I think we agreed earlier in the meeting
8 that this should be done. That workgroup would
9 have responsibility initially for those two
10 generic OTIBs, plus Appendix BB right now.

11 **DR. BRANCHE:** That would be included.

12 **DR. ZIEMER:** Would be included. And in
13 principle, all of the appendices, but right now
14 Appendix BB is on the -- on the --

15 **DR. BRANCHE:** Okay.

16 **DR. ZIEMER:** -- screen. So I would -- I would
17 hope that at least a couple of the individuals
18 on this workgroup would be individuals --

19 **DR. BRANCHE:** From procedures.

20 **DR. ZIEMER:** -- who have been familiar with the
21 6000 and 6001 work from procedures, so let me
22 ask for volunteers and -- okay, we've got
23 Josie. Who else?

24 **DR. BRANCHE:** Griffon.

25 **DR. ZIEMER:** Griffon. I'm going to volunteer

1 for this one.

2 **DR. BRANCHE:** Ziemer, that's two from
3 procedures.

4 **DR. POSTON:** I'll volunteer.

5 **DR. BRANCHE:** Poston.

6 **DR. ZIEMER:** John Poston.

7 **DR. BRANCHE:** That's four.

8 **DR. ZIEMER:** We could have an alternate?

9 **MS. MUNN:** I wouldn't mind serving as the
10 alternate as long as I didn't have major
11 responsibilities for --

12 **DR. ZIEMER:** Munn as alternate.

13 **DR. BRANCHE:** And who will be the chair?

14 **DR. ZIEMER:** Well, let's see, John Poston, can
15 you handle this as chair?

16 **DR. POSTON:** Sure.

17 **DR. ZIEMER:** I know you can handle it, in terms
18 of ability. I'm really asking about time.

19 **DR. POSTON:** Well, it'd be better if someone
20 else chaired it 'cause I'm on a National
21 Academy committee right now and I just don't
22 have time.

23 **DR. ZIEMER:** Okay. Josie?

24 **MR. GRIFFON:** What about you, Paul?

25 **DR. ZIEMER:** Huh?

1 **MR. GRIFFON:** How about you chair it? Can you
2 chair this one? You can appoint yourself
3 maybe.

4 **DR. ZIEMER:** Well, I can appoint myself.

5 **MS. BEACH:** I would agree with that
6 appointment, Paul.

7 **DR. ZIEMER:** I've been outvoted. I will -- I
8 will chair this, okay.

9 **DR. BRANCHE:** Okay.

10 **DR. ZIEMER:** I've been avoiding these.

11 **DR. BRANCHE:** I noticed.

12 **MS. MUNN:** Wisely so.

13 **DR. ZIEMER:** Okay, that will take care of that
14 one.

BOARD WORKING TIME:

STATUS OF SELECTION OF BOARD CONTRACTOR

15 Selection of Board contractor, status report.

16 **DR. BRANCHE:** There was a solicitation for --
17 sorry, a synopsis of a solicitation -- that
18 means an announcement letting people know that
19 an announcement is about to come -- and that
20 was issued on June 6th. I've checked in with
21 David Staudt, hoping that he would be able to
22 join us for the call, but he's unable to do
23 that today. He has provided me with an update,
24 and that is early next month all Board members
25

1 will receive a draft. You all asked for an
2 opportunity to review it. I suspect that you
3 will not have very much time to review it.
4 I've asked him to give you a hard deadline so
5 that things can keep moving forward, but the
6 announcement is expected to go out in July.
7 The solicitation for the contractor is expected
8 to go out in July, and that's my update.

9 **UNIDENTIFIED:** Thank you.

10 **DR. ZIEMER:** Okay.

11 **DR. BRANCHE:** I think I'm still on.

12 **MR. GRIFFON:** When you -- when you send that
13 draft, is there any way you can send the
14 previous version, just so we have side-by-side?
15 Is that possible?

16 **DR. BRANCHE:** I have to --

17 **MR. GRIFFON:** 'Cause that -- I --

18 **DR. BRANCHE:** See, I have to work with David
19 'cause I don't have a copy of the previous
20 version. I can ask him. I --

21 **MR. GRIFFON:** Well, since there's a lot -- a
22 lot of --

23 **DR. ZIEMER:** That would be helpful.

24 **MR. GRIFFON:** -- language --

25 **DR. BRANCHE:** I know it would be helpful.

1 **MR. GRIFFON:** -- similar --

2 **DR. BRANCHE:** Yeah, I just want to make certain
3 that we honor the first request, which was to
4 get it out to you. And that, in an attempt to
5 get the other in detail, we don't delay getting
6 the solicitation out 'cause time is ticking.

7 **MR. GRIFFON:** Yep.

8 **DR. BRANCHE:** I think I'm still on here, which
9 is --

10 **DR. ZIEMER:** Yes, you've got --

11 **TRACKING STATUS OF TRANSCRIPTS AND MINUTES**

12 **DR. BRANCHE:** -- the tracking of minutes and
13 transcripts. We are up to date, up to speed
14 and -- as far as all the transcripts -- we are
15 on time and on schedule. The one exception, I
16 did-- I never said there would be a deadline
17 for when we would get the application of the
18 new redaction policy to those Board meetings
19 that oc-- and -- and conference call--
20 conference -- Board conference calls that
21 occurred from May through the end of last year.
22 It -- we have applied the new redaction policy
23 to those transcripts, but we have not yet
24 posted them. There's one more small step that
25 has to happen before they're posted, and we

1 hope to have that happen soon -- hopefully
2 before our early August Board conference call.

3 **FUTURE PLANS AND MEETINGS**

4 **DR. ZIEMER:** Thank you, Christine. Are there
5 any changes in meeting plans in -- in future
6 meeting plans --

7 **DR. BRANCHE:** No --

8 **DR. ZIEMER:** -- that we --

9 **DR. BRANCHE:** -- there are no changes in the
10 dates. However, this is the time when we need
11 to determine when our December meeting would
12 occur -- excuse me, where our December meeting
13 would occur. At this time our December meeting
14 is scheduled for December 16th through 18th,
15 and I recall a discussion about the fact that a
16 few -- at least one Board member -- and it was
17 Dr. Melius; he's not here -- asked that the
18 location be east of the Mississippi River.

19 **MR. CLAWSON:** I take it'll not be in the
20 Rockies.

21 **DR. BRANCHE:** Well, that's not east of the
22 Mississippi, is it, Brad?

23 **MR. CLAWSON:** That's right. I know.

24 **DR. BRANCHE:** Geography was not your strong
25 suit, but we still love you. And --

1 **DR. POSTON:** We've got to wait to see where the
2 flood goes.

3 **DR. BRANCHE:** Yeah, we do -- no, we don't need
4 to see where the flood goes, but I would say --

5 **DR. ZIEMER:** It may be in the Mississippi
6 River.

7 **DR. BRANCHE:** -- but I would say that, in
8 discussing some of this with NIOSH staff, it
9 appears as if Savannah -- the Savannah River
10 Site would be coming up for discussion at that
11 meeting, and it might be a nice idea to have it
12 -- to have the meeting located in or around
13 that area, so Georgia or South Carolina.

14 **DR. ZIEMER:** The last time we met in the,
15 quote, Savannah River area, we were down in
16 Charleston. And that's really quite a ways
17 from the site. It's alm--

18 **DR. BRANCHE:** No, I think we would go in--

19 **DR. ZIEMER:** -- it's almost too far. I don't
20 know if Aiken is big enough to --

21 **MR. PRESLEY:** See? I don't know if
22 (unintelligible).

23 **DR. BRANCHE:** Aiken -- Aiken --

24 **DR. POSTON:** (Off microphone) (Unintelligible)

25 **DR. BRANCHE:** Well, I mean if -- if you all ag-

1 - again, if you all agree to the general
2 location, we will try to be sensitive to where
3 the workers are located. I've al-- I've
4 already heard about the fact that Charleston
5 was too far.

6 **DR. POSTON:** Well, Augusta's nice.

7 **DR. BRANCHE:** So there's Augusta --

8 **DR. ZIEMER:** Augusta would be --

9 **DR. BRANCHE:** -- there's Aiken.

10 **DR. ZIEMER:** Augusta would be all right.

11 **DR. POSTON:** Augusta anyway.

12 **DR. ZIEMER:** It's got to be Augusta or Aiken as
13 our choice for --

14 **DR. BRANCHE:** Well, if you'll give us -- again,
15 if -- if we can agree on the location, we will
16 work -- given the parameters of our -- of our
17 meeting needs, with the -- with the specific
18 location.

19 **MS. MUNN:** Let's try for Augusta.

20 **DR. BRANCHE:** Okay.

21 **MS. MUNN:** Sounds good.

22 **DR. BRANCHE:** Augusta, Aiken, someplace in that
23 general area.

24 And then we have -- the next face-to-face
25 meeting following that would be in February --

1 February 17th through 19th is the -- is the
2 face-to-face meeting for which we've yet to
3 select a location. If you have some general
4 ideas, it would be helpful for Zaida and me to
5 hear that now so we can at least begin to look
6 at -- if you give us several locations, we can
7 begin to look at --

8 **MR. PRESLEY:** Somewhere where it's warm.

9 **DR. ZIEMER:** Hawaii?

10 **MR. PRESLEY:** Don't put us in Boston.

11 **DR. BRANCHE:** Okay, somewhere where it's warm
12 is not enough. I need a little bit more focus
13 than that, Bob. I love you, too, but I need a
14 little bit more focus than someplace where it's
15 warm.

16 **DR. POSTON:** San Juan, Puerto Rico.

17 **DR. BRANCHE:** Yeah, uh-huh.

18 **DR. POSTON:** There is a site there, by the way.

19 **DR. BRANCHE:** I understand.

20 **MS. MUNN:** Are we in a position to second-guess
21 where we are going to be with LANL and -- and
22 the folks in New Mexico by that period of time?

23 **DR. BRANCHE:** Larry or a member of his staff
24 might be able to respond to that question. I
25 don't think he heard the question. Can we say

1 anything yet -- yet about Los Alamos or -- what
2 was the other one, Wanda, New Mexico?

3 **MS. MUNN:** Sandia -- any of the --

4 **DR. BRANCHE:** If -- where NIOSH would be --

5 **MS. MUNN:** -- New Mexico sites by next February
6 --

7 **DR. BRANCHE:** Is it too early to tell?

8 **MS. MUNN:** Is that a reasonable site?

9 **MR. ELLIOTT:** Sandia, I can't -- I can't answer
10 that. We will be ready to present on Savannah
11 River. That's our -- a goal, and I think it
12 would be appropriate that we -- we have -- if
13 you recall, the Board has met in Augusta and
14 the Board has met in Charleston --

15 **DR. BRANCHE:** We're talking about February now.

16 **MR. ELLIOTT:** Oh, in February.

17 **DR. BRANCHE:** We've already agreed about
18 Augusta --

19 **MR. ELLIOTT:** Oh, okay.

20 **DR. BRANCHE:** -- or Aiken for December.

21 **MR. ELLIOTT:** I'm sorry, I was in and out --

22 **DR. BRANCHE:** We're talking about the February
23 meeting, I'm sorry.

24 **MR. ELLIOTT:** I can't speak to Sandia or Los
25 Alamos --

1 DR. ZIEMER: It may be too early, but --

2 MR. ELLIOTT: -- at this point.

3 DR. ZIEMER: -- we might consider that as a
4 possi-- possibility.

5 DR. BRANCHE: Okay, that -- that helps.

6 DR. ZIEMER: Would probably be Albuquerque or
7 Santa Fe then, I suppose.

8 MR. CLAWSON: So for the September --

9 DR. BRANCHE: Santa Fe --

10 MR. SCHOFIELD: I would say that at that time
11 of year there's a good chance there could be
12 quite a bit of snow.

13 DR. ZIEMER: Yeah, that's a problem.

14 DR. BRANCHE: But you could have a barbecue for
15 us if we come. Right?

16 MR. SCHOFIELD: (Off microphone)

17 (Unintelligible) would be the wiser choice.

18 DR. BRANCHE: Okay, so that would be for the
19 February meeting.

20 DR. ZIEMER: That's probably --

21 DR. POSTON: Everybody's got to rent a car.

22 MR. SCHOFIELD: Yeah.

23 DR. ROESSLER: There are shuttles.

24 MR. CLAWSON: So Christine, for September we
25 still are on for California --

1 **DR. BRANCHE:** Absolutely, the location has been
2 selected.

3 **MR. CLAWSON:** Right, LA area. Correct?

4 **DR. BRANCHE:** Redondo Beach, I believe is the -
5 - is that the right -- Zaida, Redondo Beach,
6 the hotel's been selected, the contract's been
7 signed. And I believe Zaida sent a message out
8 to you with those -- with that information.

9 **UNIDENTIFIED:** Not yet.

10 **DR. BRANCHE:** Not yet? Okay, forgive me.

11 **DR. POSTON:** It would help to send out
12 (unintelligible).

13 **DR. BRANCHE:** She -- she only last week signed
14 the contract.

15 **DR. ZIEMER:** Okay, if you have other
16 suggestions -- I don't think we need to decide
17 today on --

18 **DR. BRANCHE:** We do not.

19 **DR. ZIEMER:** -- the other one.

20 **DR. BRANCHE:** Thank you.

21 **DR. ZIEMER:** Are there any other items that
22 need to come before us today?

23 **RESPONSIBILITIES OF BOARD'S REPRESENTATIVE TO DOE**

24 **DR. BRANCHE:** There was one, Dr. Ziemer, and
25 that was the responsibilities of the person who

1 would represent the Board to DOE. That was
2 something that came up yesterday. In talking
3 to our colleague-- my colleagues at DOE, you
4 all wanted to know the roles for this
5 particular contact person. They can provide
6 information on the Board's approaches, the
7 Board's handling of information and data, and
8 how the Board assigns work to its contractors.
9 The person can also serve as a conduit for
10 Board -- for questions that would be from the
11 Board back to DOE on DOE's procedures.

12 **DR. ZIEMER:** I -- I have a feeling that we --
13 we left this a little bit fuzzy. It wasn't
14 clear I think to all of us that we needed an
15 official representative at this point. I'm
16 wondering if we can operate under the following
17 parameters, where at least for now --

18 **DR. BRANCHE:** Uh-huh.

19 **DR. ZIEMER:** -- where you would --

20 **DR. BRANCHE:** Right.

21 **DR. ZIEMER:** -- serve as the contact point
22 where an issue arose.

23 **DR. BRANCHE:** Uh-huh.

24 **DR. ZIEMER:** And you would have a knowledge of
25 the cleared individuals on the Board --

1 **DR. BRANCHE:** I'm getting that, yes. Uh-huh.

2 **DR. ZIEMER:** -- and would call on one or more
3 of them to address whatever issues came up.

4 **DR. BRANCHE:** Well, let's do that for now, and
5 if there --

6 **DR. ZIEMER:** If at some point we need --

7 **DR. BRANCHE:** -- ends up being a sticking
8 point, we can revisit this.

9 **DR. ZIEMER:** Right, because we -- we talked,
10 for example, about having a, quote, workgroup
11 of those individual and -- and we don't want to
12 sort of --

13 **DR. BRANCHE:** That's not going to work.

14 **DR. ZIEMER:** -- set them out and put targets on
15 their backs. We -- we aren't' going to have a
16 public list of our cleared people.

17 **DR. BRANCHE:** Right.

18 **DR. ZIEMER:** So as a practical -- and even --
19 even identifying an individual as that point of
20 contact may be a problem. Maybe not in a
21 particular case, but in general 'cause it may
22 not always be -- let's say it was -- we -- we
23 had talked about Bob Presley, but what if it
24 was somebody else? We -- we end up having to
25 identify a cleared person, so I'm wondering if

1 we can do it this way where --

2 **DR. BRANCHE:** Let's at least try it.

3 **DR. ZIEMER:** -- where you would channel --

4 **DR. BRANCHE:** Uh-huh.

5 **DR. ZIEMER:** Josie, you have ano--

6 **MS. BEACH:** And will we have a clear
7 description sometime soon?

8 **DR. BRANCHE:** A clear description of?

9 **MS. BEACH:** Of the responsibilities of that
10 individual or those individuals?

11 **DR. BRANCHE:** I -- I think what Paul is
12 suggesting is that we sort of hold off on that
13 until -- and -- and I would serve as -- as this
14 conduit for now, and if --

15 **DR. ZIEMER:** As issues arose and came in --

16 **DR. BRANCHE:** Right.

17 **DR. ZIEMER:** -- where we needed a cleared
18 person to interact --

19 **DR. BRANCHE:** A specific Board person.

20 **MR. GRIFFON:** Can someone describe to me what
21 are the -- what kind of issues? The doc-- the
22 --

23 **DR. ZIEMER:** I don't know.

24 **MR. GRIFFON:** And -- but why -- why -- I don't
25 understand the cleared individuals.

1 **DR. BRANCHE:** I --

2 **MR. GRIFFON:** Discussing in a -- in -- on the
3 phone or an e-mail or anywhere else. It has
4 nothing to do with cl-- you know, you can't
5 discuss classified issues anyway.

6 **DR. ZIEMER:** No, if we need to have somebody go
7 with Larry --

8 **DR. BRANCHE:** Or his staff.

9 **DR. ZIEMER:** -- or Larry's staff --

10 **MR. GRIFFON:** Yeah.

11 **DR. ZIEMER:** -- to observe something, I -- I
12 mean I don't know the conditions under which we
13 --

14 **DR. BRANCHE:** Right.

15 **DR. ZIEMER:** All I'm saying is I don't -- I
16 don't think we need at this point a workgroup
17 or an identified individual.

18 **DR. BRANCHE:** Right, we've don--

19 **MR. ELLIOTT:** Let me give you an example --

20 **MR. GRIFFON:** Things in the past where a few of
21 us have gone --

22 **DR. ZIEMER:** Yeah, and -- and you found out
23 about that because --

24 **DR. BRANCHE:** And we can -- on an as -- as
25 need-to-know basis.

1 **DR. ZIEMER:** I'm saying let's remain on an ad
2 hoc basis whereas that need arises --

3 **DR. POSTON:** Thanks for the reminder about
4 (unintelligible).

5 **DR. ZIEMER:** -- Christine can call on the
6 cleared individuals.

7 **DR. BRANCHE:** Uh-huh, yes.

8 **DR. ZIEMER:** Yeah. I think we're okay on --

9 **DR. BRANCHE:** Yeah, we're --

10 **DR. ZIEMER:** Okay. Larry.

11 **MR. ELLIOTT:** I could give you several
12 examples, one of which might be that -- that
13 the Board develops a document and DOE wants to
14 review it and has some concerns or issues about
15 it, and they need somebody that they can talk
16 to in a cleared status. That might serve as
17 one of the roles that not -- maybe Dr. Branche
18 can't serve; a cleared Board member would have
19 to serve in.

20 Dr. Ziemer's example of when we go out in the
21 field or SC&A goes out in the field and we want
22 a balanced perspective of cleared individuals
23 involved is another perhaps possibility.

24 **DR. BRANCHE:** But at this poi-- at this time,
25 we consult a list of cleared individuals to do

1 that. And since these questions have come up,
2 the interactions between DOE and me
3 specifically, as it concerns cleared
4 individuals, has improved. Our list was not up
5 to date, not theirs and not mine, and we've
6 resolved that particular issue substantially
7 over the last several weeks. So Paul's
8 suggestion of asking Board members, based on
9 their clearance, to serve in this capacity on
10 an as-needed basis as a way to proceed in the
11 interim I think is -- is a wise approach for
12 now. Which means the need for a specifically-
13 named contact person is kind of put aside for
14 the moment.

15 **MR. GRIFFON:** I -- I guess what I'm -- what I'm
16 wresting with is if -- if -- Larry's example is
17 -- is certainly one that I've been in the
18 middle of before, that -- that -- so if we
19 generate a document on the Board level -- first
20 of all, there -- there are certainly issues if
21 we generate something that by -- and this is
22 always the -- the case in this sort of -- I
23 mean this isn't research necessarily, but by
24 putting some things together you potentially
25 got into classified issues. I mean -- boy,

1 tha-- tha-- there's a trickle-down there.
2 Larry knows about it. I certainly know about
3 it. I mean if you generate that report and it
4 is deemed that there's something classified in
5 there, you've got hard drive issues, you've got
6 all kinds of things that could --

7 **DR. BRANCHE:** Well -- and --

8 **MR. GRIFFON:** -- result, but anyway, my point
9 here is that I -- I had this sort of situation
10 in some of my research and it -- it's not --
11 it's not black and white. I mean I've got -- I
12 -- I was in Oak Ridge where I had three
13 security offers that -- three and it was like
14 two to one split on how they came down on a
15 certain issue in my report and -- and I was --
16 I was -- it was basically a -- not a
17 negotiation, but we -- we were discussing it
18 between me being the author and -- and DOE.
19 And I'm wondering how -- you know, if we
20 generate something there's always different
21 view on -- there -- there's gra-- I think
22 there's some gray area --

23 **DR. BRANCHE:** Was this in your capacity as a
24 Board member?

25 **MR. GRIFFON:** -- and -- and some -- some

1 classifiers I've seen have erred on the si-- on
2 -- erred real strictly and others are -- are
3 slightly different from that --

4 **DR. BRANCHE:** Right.

5 **MR. GRIFFON:** -- so I'm just wondering --

6 **DR. ZIEMER:** All -- all I'm proposing is that
7 we not set up a workgroup or --

8 **MR. GRIFFON:** That's more --

9 **DR. ZIEMER:** -- an individual right now --

10 **MR. GRIFFON:** I agree with that part of --

11 **DR. ZIEMER:** -- we continue to operate as we
12 have. If a need comes in, DOE would let
13 Christine --

14 **DR. BRANCHE:** Me know.

15 **DR. ZIEMER:** -- know that -- or maybe Larry
16 would say we -- we're going to look at these
17 documents and we'd like to have a Board member
18 along.

19 **DR. BRANCHE:** And we'll assign it as needed.

20 **DR. ZIEMER:** Christine will know who the -- who
21 the cleared people are --

22 **MR. GRIFFON:** Yeah.

23 **DR. ZIEMER:** -- that can participate --

24 **MR. GRIFFON:** I guess we can just monitor the
25 process and -- and if -- if you can just let us

1 know how many of these things hap-- whatever
2 these issues are that arise --

3 **DR. BRANCHE:** Right.

4 **DR. ZIEMER:** Right.

5 **MR. GRIFFON:** -- if we haven't had any in six
6 years --

7 **DR. ZIEMER:** If we have to formalize something
8 at some point we'll do it, but I -- I don't see
9 any advantage to formalizing this at this
10 point, other than having cleared individuals
11 available --

12 **DR. BRANCHE:** Right.

13 **DR. ZIEMER:** -- and we have some or -- we will
14 have more, hopefully, as others become cleared.

15 **DR. BRANCHE:** Just so --

16 **MR. GRIFFON:** I -- I would at least appreciate
17 it if you could let other -- the other Board
18 members know -- like this is your -- to the
19 best you can describe it in a -- in a -- you
20 know, an open e-mail, this issue arose and I've
21 assigned selected Board members to -- you know
22 --

23 **DR. ZIEMER:** Well, let me ask -- I'm not sure
24 we can always let people know when --

25 **DR. BRANCHE:** That's --

1 DR. ZIEMER: -- these issues arise even.

2 DR. BRANCHE: Right. I think I can tell you
3 when it's been resolved, potentially, but I
4 don't know if --

5 DR. ZIEMER: Well, you may not even be --

6 DR. BRANCHE: -- I can tell you when arise.

7 DR. ZIEMER: -- (unintelligible).

8 DR. BRANCHE: Yeah, we -- I'll have to work
9 with DOE and see how this happens, but -- let
10 me see how -- how we work on this.

11 DR. ZIEMER: Yeah. If something arises, you
12 can de-- you may --

13 DR. BRANCHE: I'll give you as --

14 DR. ZIEMER: -- find out what --

15 DR. BRANCHE: -- much information as I can.

16 DR. ZIEMER: -- what can the Board --

17 DR. BRANCHE: Right, no.

18 DR. ZIEMER: -- what can be made known to the
19 Board about this. I don't know, Larry do you --
20 -- you've had some experience in that.

21 DR. BRANCHE: Well, I -- I mean I've had some
22 experience.

23 DR. ZIEMER: In general, some of this -- even
24 the fact that it occurs is probably not
25 releasable. Right?

1 **DR. BRANCHE:** Right.

2 **DR. ZIEMER:** Okay.

3 **DR. BRANCHE:** Well, let me just make certain
4 that --

5 **MR. ELLIOTT:** You can't call attention to it.

6 **DR. BRANCHE:** Right. Let me just make certain
7 that everyone knows, for the record, because
8 the word "workgroup" around this has been -- a
9 workgroup for this could never be established.

10 **MR. PRESLEY:** That's right.

11 **DR. BRANCHE:** Our procedures for workgroups
12 require that we have transcripts, that we have
13 a court reporter. So the idea of a workgroup
14 for this is not appropriate.

15 **MR. GRIFFON:** Again, I -- I --

16 **DR. BRANCHE:** So --

17 **MR. GRIFFON:** Well, I'm still a little hazy on
18 what this is, but I mean I'm willing to
19 proceed. It just -- kind of monitor it for
20 now, but you know, what this is --

21 **DR. BRANCHE:** I understand.

22 **MR. GRIFFON:** -- again, this -- regarding
23 policies, regarding classified documents, I see
24 no problem with having a workgroup on that.
25 The -- the other things, I can understand your

1 point, but regarding a -- you know, if there's
2 -- there's this discussion of the policy going
3 back and forth --

4 **DR. ZIEMER:** There's -- there will be no policy
5 discussion --

6 **MR. GRIFFON:** -- (unintelligible) --

7 **DR. BRANCHE:** No.

8 **DR. ZIEMER:** -- as far as I know.

9 **DR. BRANCHE:** Exactly.

10 **DR. ZIEMER:** Yeah. We're not talking about
11 having any policy discussions.

12 **MR. GRIFFON:** Okay.

13 **DR. ZIEMER:** All we're saying is we're going to
14 continue to operate as we are. If a cleared
15 person is needed for -- from the Board for
16 something, we'll make them available.

17 **DR. BRANCHE:** Right. That's all I have on that
18 particular --

19 **DR. ZIEMER:** Board members, are there other
20 issues that we need to address today?

21 (No responses)

22 If not, I thank you for your time and your
23 patience. I declare that this meeting is
24 adjourned. Thank you for all who participated,
25 members of the public and staff. We appreciate

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it.

(Whereupon, the meeting was adjourned at 12:10
p.m.)

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CERTIFICATE OF COURT REPORTER**STATE OF GEORGIA****COUNTY OF FULTON**

I, Steven Ray Green, Certified Merit Court Reporter, do hereby certify that I reported the above and foregoing on the day of June 26, 2008; and it is a true and accurate transcript of the testimony captioned herein.

I further certify that I am neither kin nor counsel to any of the parties herein, nor have any interest in the cause named herein.

WITNESS my hand and official seal this the 26th day of July, 2008.

STEVEN RAY GREEN, CCR, CVR-CM, PNSC**CERTIFIED MERIT COURT REPORTER****CERTIFICATE NUMBER: A-2102**